

## IV. Analysis and Evaluation

## Introduction

The analysis and evaluation of the cultural landscape for the Lincoln Memorial grounds are based on an examination of the historical records and the documentation of existing landscape resources in the study area. A summary discussion of the cultural landscape components documents landscape patterns, relationships, and individual features within a site, which define the character of the designed landscape. With this information, the overall significance and integrity of the landscape is addressed according to national register criteria for landscapes.

To help present this complex information, there are two parts:

<b>Overall Landscape</b>	<i>Lincoln Memorial grounds</i>
<b>Component Landscape</b>	<i>Reflecting Pool area</i> <i>Lincoln Memorial circle and radial roads</i> <i>Watergate area</i>

The ***overall landscape*** is defined as the aggregate of sites (component landscapes) or features that define a cultural landscape which is eligible for the National Register of Historic Places. Whereas the ***component landscape*** is a definable physical component of a landscape that contributes to the significance of a National Register Property or in some cases, is individually eligible for the National Register. A ***component landscape*** can be further subdivided into smaller features and warrants individual documentation to adequately record the physical character of the property. These landscape features based on their significance and integrity are either *contributing* or *noncontributing* to the period of significance. For the majority of landscape characteristics, a contributing and noncontributing list is present which defines that particular characteristic. The list of contributing features can then be used to quantify the significant historic landscape for a national register nomination for the Lincoln Memorial grounds. Chapter five, “National Register Status,” provides a more in depth discussion of the criteria that is followed for this procedure.

## Overall Landscape Characteristics

### Land Use

West Potomac Park is the part of the monumental core of the nation’s capital and includes the Lincoln Memorial, Washington Monument and Jefferson Memorial. Once a part of the tidal “flats” of the Potomac River, the park was created from fill, dredged from the Potomac River. In 1902 the McMillan Commission defined a vision for the area that included not only parks but also memorials to great men and important events in American history. The Lincoln Memorial was the first such memorial to be constructed. It was sited on the continuation of the east/west axis planned by Pierre L’Enfant to extend from the capitol to the monument to George



Washington. Upon its completion, the Lincoln Memorial's classical form graced the river's edge as a symbol of reconciliation between the north and south. The parklike grounds of the commemorative landscape surrounding the memorial and other monuments were mostly designed to be used for passive recreation such as picnicking and walking. During the period of development, the Office of Public Buildings and Grounds set aside areas in West Potomac Park for active recreational activities. Areas north and northwest of the Lincoln Memorial were designated for activities such as golf. Bridle trails were also established along the Potomac River on the north, west and south sides of the memorial.



***Figure 34 – Visitors enjoying the Reflecting Pool, 1931. Used by permission from the National Geographic Society.***



***Figure 35 - Model sailboats in the Reflecting Pool, 1931. Used by permission from the National Geographic Society.***

A recent addition to the monumental areas of West Potomac Park are concession facilities and information kiosks, designed to serve the large numbers of visitors to the park. The services are

generally located near major pedestrian and vehicular circulation routes. At the Lincoln Memorial, visitor services are located southwest and northwest of the Reflecting Pool. Food concessionaires, tour bus fee collectors, a gift shop, first amendment rights vendors, and the National Park Service (NPS) ranger information facilities are the types of services available in these two areas. With the addition of non-contributing services, the park-like atmosphere near the main approachway to the Lincoln Memorial has been dramatically compromised. The National Park Service has attempted to control the impact of visitor services by clustering all these needs between the Reflecting Pool and the eastern side of the circular roadway. Even with this effort, the symbolic design of the approach to the memorial is congested.



***Figure 36 - Grassy area north of Lincoln Memorial is used for active recreation, November 1996. LINC 11-29.***

Passive recreation is still the primary use of this commemorative landscape. Active recreational uses have continued into the present, but are maintained in open spaces away from areas of major tourist visitation. To separate diverse uses, park officials have designated fields for a wide range of recreational opportunities. Use of the Lincoln Memorial grounds as a public forum developed over time, and considering the historical significance of the events staged there, precedence for such use has become well established. Large demonstrations and public assemblies will inevitably continue to be staged there for some time. See Map 9 *Overall Landscape - Land Use* for delineation of use areas.

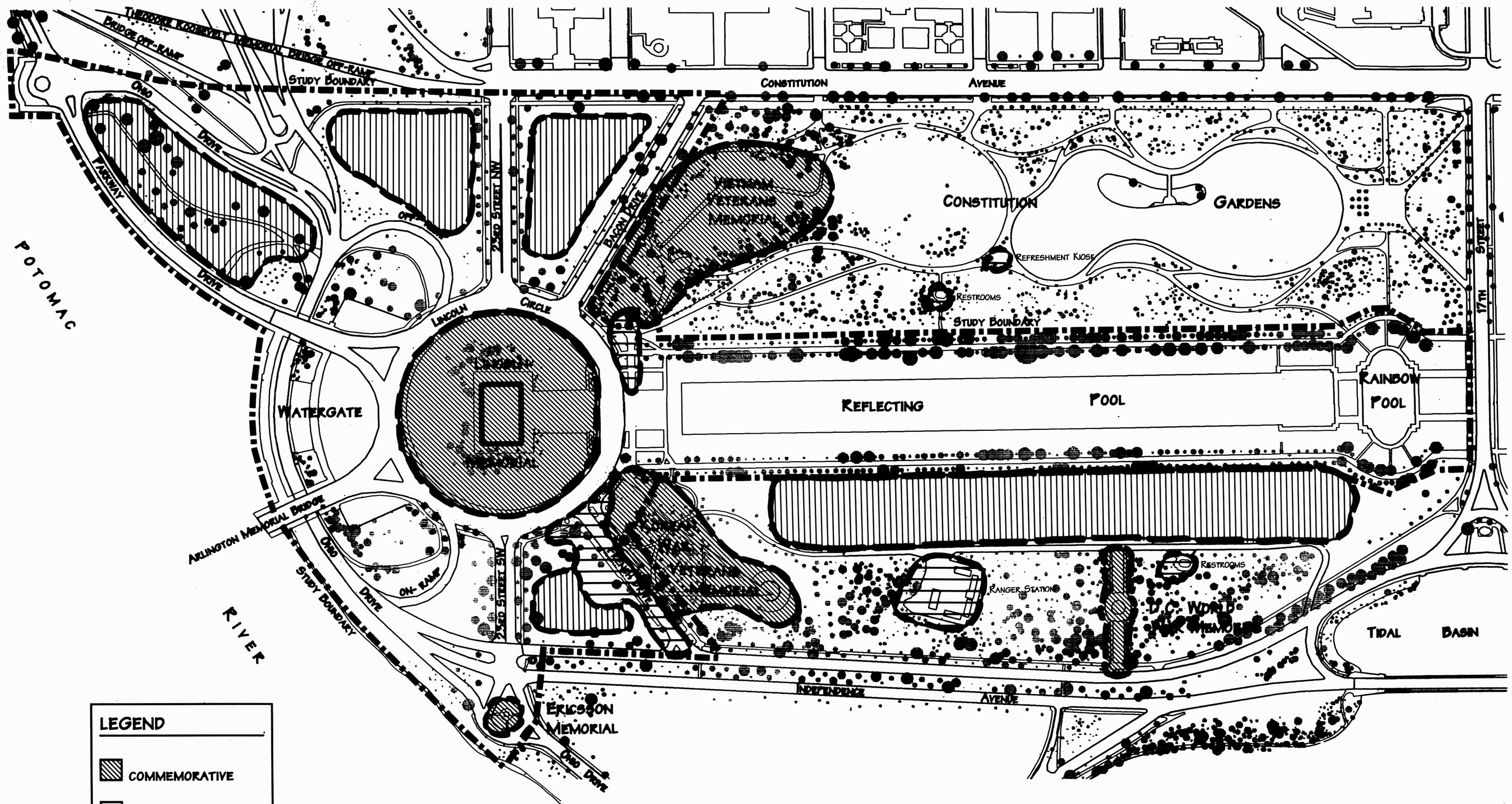
***Figure 37 - Visitors walking along the south Reflecting Pool path, November 1996. LINC 11-30.***







<b>Contributing Features</b> <ol style="list-style-type: none"><li>1. Lincoln Memorial commemorative landscape</li><li>2. Reflecting Pool passive recreation</li><li>3. Watergate area active recreation</li><li>4. Active recreation within grass panels, Lincoln Memorial radial roads</li></ol>	<b>Noncontributing Features</b> <ol style="list-style-type: none"><li>1. Service oriented area, French Drive, outside curb of Lincoln Circle</li></ol>
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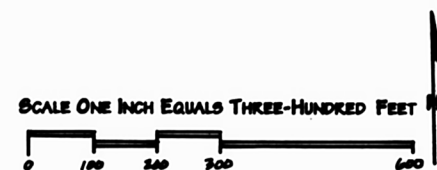






**LEGEND**

	COMMEMORATIVE
	PASSIVE RECREATION
	ACTIVE RECREATION
	SERVICE



**SOURCES:**

- U.S. NATIONAL PARK SERVICE, NACC RESOURCE MANAGEMENT, LIVETREE DATABASE, 10/86.
- FIELD INVESTIGATIONS, 1986.
- HISTORIC PHOTO DOCUMENTATION, NATIONAL PARK SERVICE, MAR8
- NATIONAL PARK SERVICE MAP FILES, SEE BIBLIOGRAPHY FOR MAP LISTING

Map 9

**LAND USE**

**OVERALL LANDSCAPE**

CULTURAL LANDSCAPE REPORT

**LINCOLN MEMORIAL GROUNDS**

PREPARED BY: M. JOSEPH DATE: OCTOBER 1986

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## **Adjacent Lands**

North and south of the Lincoln Memorial grounds are several other designed landscapes. Two contemporary memorials dedicated to the veterans of the Vietnam and Korean Wars are located northeast and southeast of the circular drive. A naturalistic park landscape called Constitution Gardens lies north of the Reflecting Pool, beyond the flood control embankment. These landscapes have changed the formal geometric character that the McMillan Commission and the National Capital Parks and Planning Commission intended for this portion of West Potomac Park. While both the Vietnam and Korean War memorials were designed to have a direct and symbolic relationship with the Lincoln Memorial building, they have little association with the park's historic landscape. The concept for Constitution Gardens contrasts even more with the original formal arrangement. On the other hand, the design of the District of Columbia War Memorial, which was constructed in 1931 on a site southeast of the Reflecting Pool, was developed according to many of the principles that relate to the design of the Lincoln Memorial grounds.

From 1913 to 1918 a row of tennis courts lay east of 17<sup>th</sup> Street and north of the area proposed for the Reflecting Pool. The courts were removed in 1918 when temporary buildings were constructed on this location for the government's war effort. To protect these structures and the other buildings along Constitution Avenue from periodic flooding, the National Park Service installed an earthen berm in 1938. The berm was located just north of the outer row of elms lining the walkway on the north side of the Reflecting Pool. Approximately 8 feet high, the berm effectively blocked views and access from the Reflecting Pool area to the north. This negative impact also changed the open character of the park. In 1970 the war buildings were removed. The "Downingesque-inspired" landscape for Constitution Gardens (1976) replaced the war buildings. The curvilinear design of the gardens deviated from the character and feel of the design originally conceived for this space by the McMillan Commission and the planning commissions of the 1920s and 1930s. When the Vietnam Veterans Memorial was installed just west of Constitution Gardens in 1982, it further compromised the original plans. The asymmetrical design of this memorial contrasted with the surrounding grounds but had a visual relationship with both the Washington Monument and the Lincoln Memorial.

The area south of the Reflecting Pool developed in a different manner. The upper part of the space remained open, while the lower portion, flanked by an old road, was maintained as a tree grove. Even though there was no specified use for this area, its relationship to the design of Reflecting Pool area was important. Both the McMillan Commission and the National Capital Parks and Planning Commission emphasized the juxtaposition of open areas (grass fields) and enclosed areas (tree groves) in their plans. Within the trees, a classical pavilion was constructed to honor D.C. citizens killed in World War I. The area remained in this state until 1942 when the government built temporary buildings on the open land. In 1964 these "tempo" were removed and the area was once again an open grassy field. After 1964 the open field was used for special events and active recreation. Subsequent changes did not occur until 1995 with the installation of the Korean War Veterans Memorial on the western portion of the open field. As with the Vietnam Veterans Memorial, the Korean War Veterans Memorial had a symbolic relationship

with the Lincoln Memorial and Jefferson Memorial, but the layout of features conflicted with the historic design of the Lincoln Memorial grounds.



**Figure 38 - Aerial view of the Korean War Memorial and its impact on the open grassy area south of the Reflecting Pool, April 1996. LINC 3-32.**

Although the Vietnam and Korean memorials and Constitution Gardens are known for their distinct designs and cultural value, these were developed independently of the historic Lincoln Memorial grounds. In addition, the change in land use from passive to active recreation on the south side of the Reflecting Pool detracts from the original design planned for this area. See Map 9 *Overall Landscape - Land Use* for delineation of adjacent use areas.



## Views and Vistas

As defined in the 1791 L'Enfant plan and subsequent McMillan Commission Plan of 1901, the most important designed vista is the main mall axis, from the steps of the Lincoln Memorial east to the Washington Monument and then from the Capitol to the Washington Monument to the Lincoln. To help frame the view and provide an unobstructed vista, double rows of elms were planted on either side of the Reflecting Pool. The vista narrowed at 17<sup>th</sup> Street where the street trees (American elm) framed the view to a controlled 160-foot opening (the same width of the Reflecting Pool). A continuation of this axis went from the west side of the Lincoln Memorial to the Watergate steps and across to the Virginia shoreline. Two other sight lines radiated from the rear side, or west side, of the Lincoln Memorial to maintain the symmetry of the design. One was to the southwest across the Potomac River to Arlington Cemetery and Arlington House, and the other was to the northwest to Parkway Drive. The fan-shaped view zone to the west is framed by white pines and elms, planted on the outside edge of the bridge and parkway approaches to Lincoln Circle. Views from the Ericsson Memorial, south of the Lincoln and along 23<sup>rd</sup> Street NW to the north provide secondary views to the Lincoln Memorial. All of these significant view zones are evident today in various degrees. However, the foundation plantings around the Lincoln Memorial are encroaching upon the openings at the base of the raised terrace wall on the north and south facades. This is more evident on the center of the north side of the memorial where the branches of hollies are arching over lower, horizontal-growing yews. After the completion of the Lincoln Memorial grounds in the 1930s, additional views from subsequent memorials to the Lincoln Memorial were emphasized based on their relationship to the Lincoln. This is evident from the Jefferson, Vietnam Veterans, and Korean War Veterans Memorials. Since these offsite views do not relate to the original design intent of the Lincoln Memorial grounds, they are noncontributing features to the overall



*Figure 39 - Main mall axis view from the raised terrace of the Lincoln Memorial to the Washington Monument, October 27, 1922. MRC 3-2.*



*Figure 40 - View from the Washington Monument to the Lincoln Memorial, c. 1930. Trees along 17<sup>th</sup> Street left an opening for the main mall axis view. MRC 3-26.*

landscape. See Map 10 *Overall Landscape - Views and Vistas* for graphic representation of contributing views.



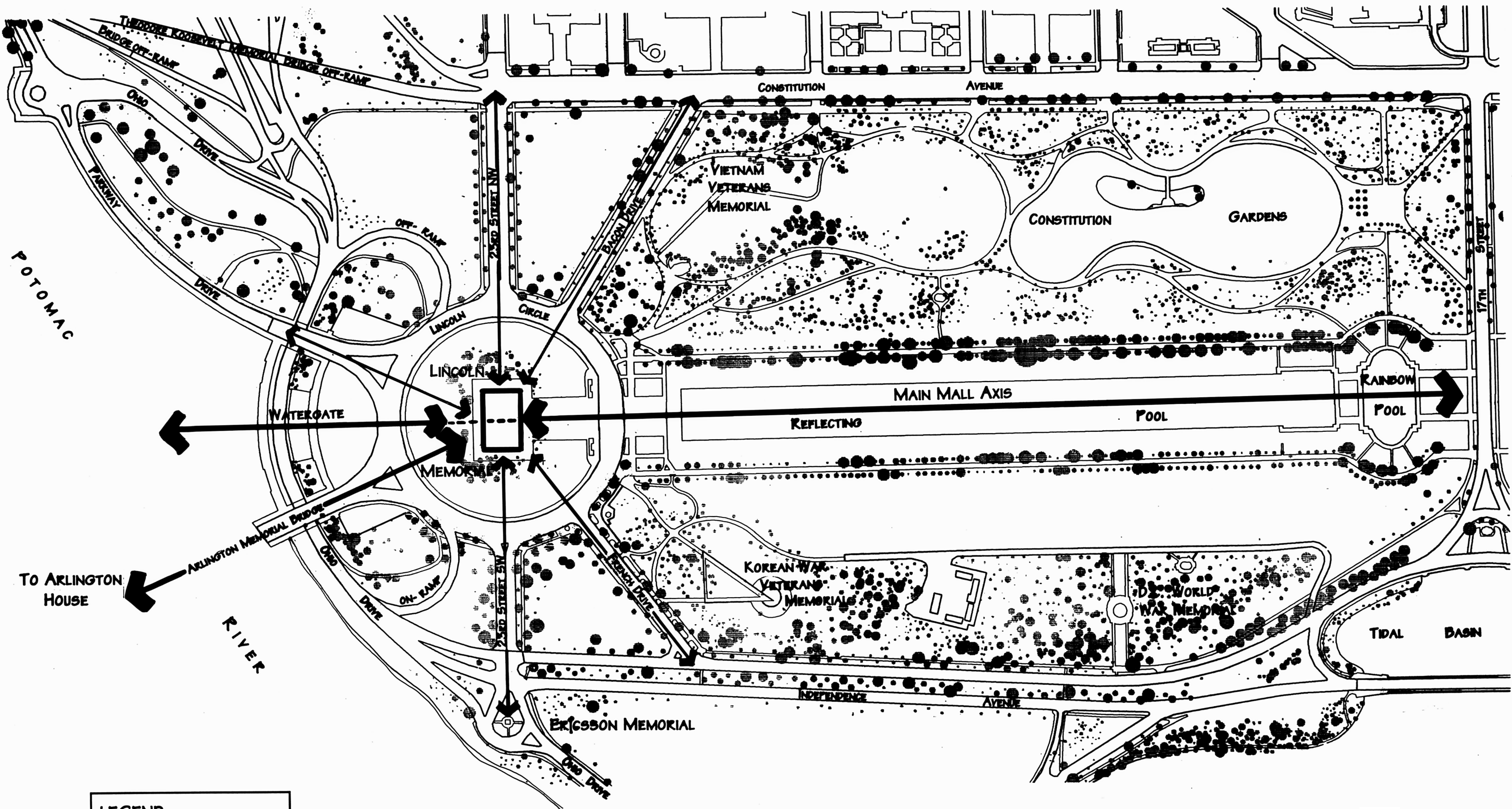
*Figure 41 - View from roof of Lincoln Memorial to the Virginia shoreline, March 11, 1996. LINC 6-22.*





*Figure 42 - Limited view of Lincoln Memorial from the Ericsson Memorial, June 1996. LINC 9-7.*

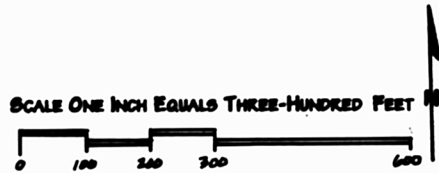
<p><b>Contributing Features</b></p> <ol style="list-style-type: none"><li>1. Mall axis vista from and to the Lincoln Memorial to Washington Monument to U.S. Capitol.</li><li>2. Vista from the Lincoln Memorial to Arlington House across Arlington Memorial Bridge (also opposing view back from Arlington House to the Lincoln Memorial)</li><li>3. Vista from and to Parkway Drive</li><li>4. Vista from radial roads to Lincoln Memorial and along radial roads from the Lincoln Memorial</li><li>5. Vista from the Lincoln Memorial raised terrace south to the Ericsson Memorial and north to Constitution Avenue, along 23<sup>rd</sup> Street, NW axis (also opposing view from the Ericsson Memorial and Constitution Avenue to the Lincoln Memorial)</li><li>6. Fan-shape vista from Lincoln Memorial west to the Virginia shoreline (also opposite view from the shoreline to the Lincoln Memorial)</li></ol>	<p><b>Noncontributing Features</b></p> <ol style="list-style-type: none"><li>1. View from and to the Vietnam Veterans Memorial to the Lincoln Memorial</li><li>2. View from and to the Korean War Veterans Memorial</li></ol>
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**LEGEND**

 MAJOR VISTA  
 MINOR VISTA



**SOURCES:**

- U.S. NATIONAL PARK SERVICE, NACC RESOURCE MANAGEMENT, LIVETREE DATABASE, 10/86.
- FIELD INVESTIGATIONS, 1986.
- HISTORIC PHOTO DOCUMENTATION, NATIONAL PARK SERVICE, MAR8
- NATIONAL PARK SERVICE MAP FILES, SEE DELINEOGRAPHY FOR MAP LISTING.

Map 10

**VIEWS & VISTAS**

**OVERALL LANDSCAPE**

CULTURAL LANDSCAPE REPORT

LINCOLN MEMORIAL GROUNDS

PREPARED BY: M. JOSEPH DATE: OCTOBER 1986

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## Spatial Organization

The Lincoln Memorial is above the banks of the Potomac River in West Potomac Park at the western end of the main east/west axis of the Mall. The line of this axis and the lines of other secondary axes are based on the design developed by Pierre L'Enfant in 1791 for the nation's capital and the McMillan Commission's (1901-1902) subsequent adaptation of L'Enfant's concept. A raised terrace elevates the memorial to a point of prominence 14 feet above grade, where views of the Washington Monument and the Capitol and the vista across the Potomac River reinforce the axial relationships.

The linear arrangement is reinforced by the long reflecting pool that captures images of both the Lincoln Memorial and the Washington Monument on the surface of the water. Two avenues of elms, planted on terraced levels in parallel rows, delineate this pool and outline a smaller transverse pool. A formal plaza and a slightly curving set of granite steps, descending to the river, connect the axis with the Potomac vistas. Spatially, the area immediately surrounding the memorial structure had been laid out in a symmetrical and geometric arrangement of drives, walks, and panels of lawn. These forms are enhanced by historic patterns of vegetation, such as the regular planting of American elms found along the roads radiating out from the circular drive.

Most of the spatial qualities of the Lincoln Memorial grounds have been retained, but development on the north and south of the Reflecting Pool



*Figure 43 - Reflection of the Lincoln Memorial on the pool, June 1996. LINC 9-24.*



*Figure 44- Reflection of Washington Monument on the pool, December 5, 1996. LINC 13-23.*

have weakened the character of these qualities. Both the construction of temporary government buildings in 1918 and the installation of a flood control levee in 1938 created an undesirable sense of enclosure on the north side. The south side suffered from the same effect when temporary government buildings were built there in 1942. The introduction of these large-scale projects compromised the broad expanse of open space originally designed for both sides of the pools. When the temporary structures were removed in 1964 and 1970, the area south of the pools was left open. On the north, however, the levee remained to limit the views, enclose the avenue of elms, and separate the pool area from the rest of the park. Subsequent memorial projects, developed northeast and southeast of the circular drive, have segmented the area further. Because of their unique designs, the memorials to the veterans of the Korean and Vietnam wars have become singular spaces, enclosed by understory trees, with little visual relationship to the historic designed landscape of the Lincoln Memorial.

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## Component Landscape

### Reflecting Pool area

#### Vegetation

The landscape plan of 1916 for the lagoon, or Reflecting Pool area, called for a two rows of English elms (known then as *Ulmus campestris*) to be planted in parallel lines along the north and south sides. These rows were designed to further define the east/west axis between the Lincoln Memorial and the Washington Monument. The total space allotted for the pools and the double rows was set at 320 feet, with the width of the pool designed for 160 feet and the allee between the trees for 40 feet. A 15-foot concrete walk delineated the passage through the elms. In each row, individual trees were planted approximately 25 feet on center. The designers sited the rows of elms and a pair of concrete walks on the top of two terraced slopes, which paralleled the pools and rose 4 feet above them. The terraces extended the full length of the axis. At the smaller pool, the trees were placed in curved lines to complement the circular sections of its geometric outline. The four lines of elms ended just before their intersection with 17<sup>th</sup> Street, as shown on the 1916 Howard plan. At this north/south thoroughfare, an appropriate break in the street trees (*Ulmus americana*) on the west and east side of 17<sup>th</sup> Street kept the main visual axis between the monuments free of large-scale distractions and served to both emphasize and frame the view.<sup>84</sup>

The planting plan from this 1916 landscape design remains essentially intact. However, a few losses and changes have occurred. Along 17<sup>th</sup> Street, the northeast line of trees framing the main axis view is no longer standing and have not been replaced. Over the years, the elms originally planted along the Reflecting Pool have died. Unlike 17<sup>th</sup> Street and the rest of the mall, which are planted with American elms, a different type of elm was selected for the Reflecting Pool area. Frederick Law Olmsted, Jr. recommended English elms for the double rows of trees along the Reflecting Pool, but documentation suggests that Dutch elm (*Ulmus x hollandica*), may have



been planted originally.<sup>85</sup> Presently, most of the Reflecting Pool elms are Dutch elms with a few smoothleaf, American, English and Scotch elms (*Ulmus carpinifolia*, *Ulmus americana*, *Ulmus procera*, *Ulmus glabra*) planted in between. Olmsted's elm selection suggests a conscience decision to define a different tree form for this area. English elms that did not survive have been replaced in the same locations, but with other more sturdy and Dutch elm disease-resistant species. Such replanting has created a corridor of trees of varying heights, crowns and circumferences. The smaller number of mature elms on the south side of the Reflecting Pool may be due to compacted soil in this area. High levels of pedestrian traffic passing between the trees to the adjacent athletic fields, as well as the trees proximity to flood prone areas of the park, may have brought about this condition. On the north side there are more mature elms. These elms are subject to less drainage problems and less compaction from recreational and pedestrian activity. The presence of a flood control berm also discourages walking between the trees to Constitution Gardens. Only a few designated paths cross over the berm, which limits impact to the elms in this area.

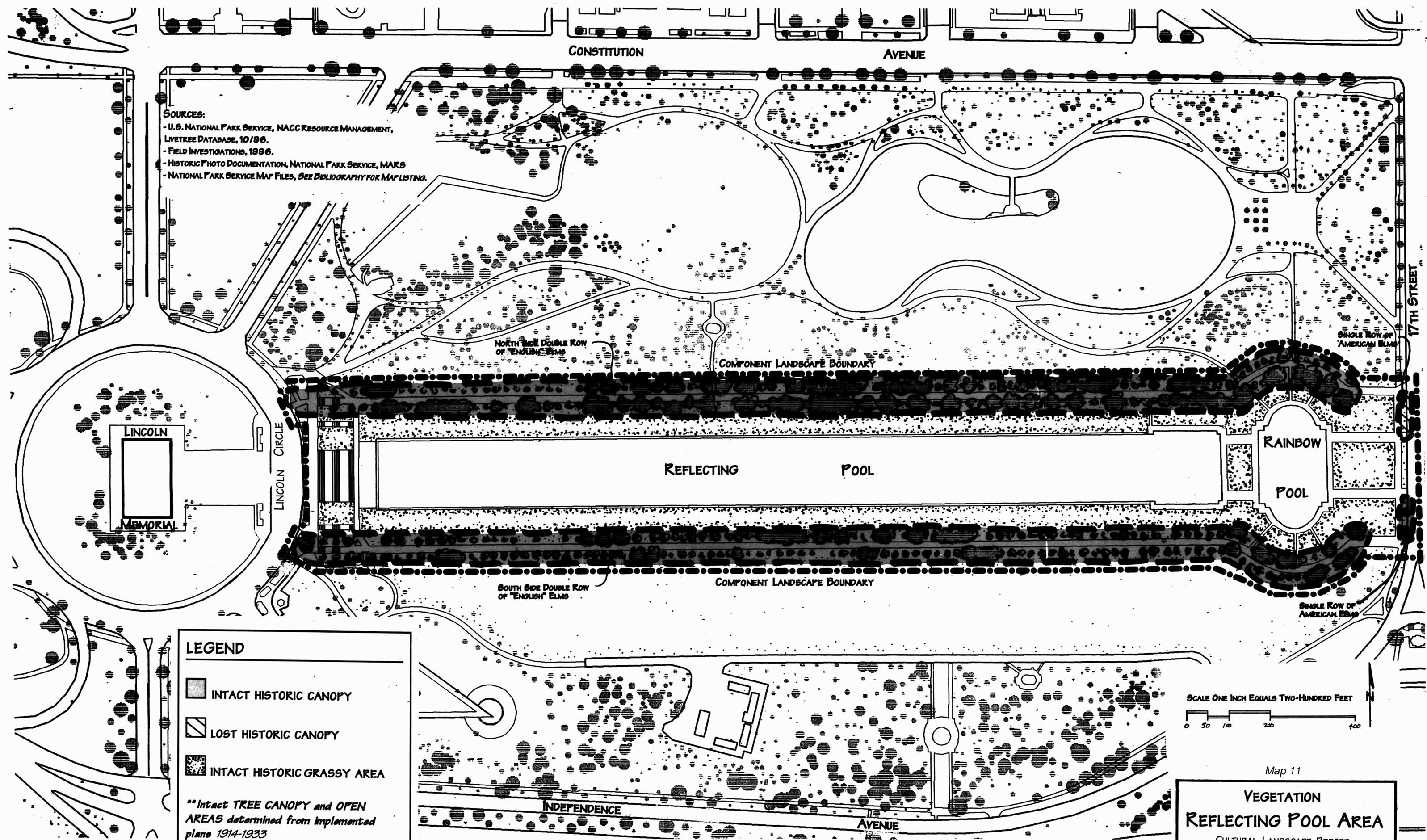


*Figure 45 – Elm walk on south side of Reflecting Pool, November 10, 1996. LINC 11-35.*

The Reflecting Pool area is divided into three vegetation zones. These zones define the spatial composition of the tree canopy of the north and south paths, 17th Street corridor, and the lawn area. By breaking the vegetation into smaller areas, there is a better sense of the integrity from the original plans. See Map 11 *Reflecting Pool area - Vegetation* map for graphic representation.

Contributing Features	Noncontributing Features
<ol style="list-style-type: none"> <li>1. Double row of “English” elms trees along Reflecting Pool main walks</li> <li>2. Remnant row of American elms along 17<sup>th</sup> Street</li> <li>3. Open grassy areas around Reflecting Pool and Rainbow Pool</li> </ol>	





SOURCES:

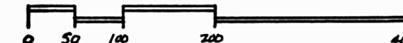
- U.S. NATIONAL PARK SERVICE, NACC RESOURCE MANAGEMENT, LIVETREE DATABASE, 10/96.
- FIELD INVESTIGATIONS, 1986.
- HISTORIC PHOTO DOCUMENTATION, NATIONAL PARK SERVICE, MARS
- NATIONAL PARK SERVICE MAP FILES, SEE BIBLIOGRAPHY FOR MAP LISTING.

LEGEND

- INTACT HISTORIC CANOPY
- ▨ LOST HISTORIC CANOPY
- ░ INTACT HISTORIC GRASSY AREA

\*\*Intact TREE CANOPY and OPEN AREAS determined from implemented plans 1914-1933

SCALE ONE INCH EQUALS TWO HUNDRED FEET



Map 11

VEGETATION  
REFLECTING POOL AREA

CULTURAL LANDSCAPE REPORT  
LINCOLN MEMORIAL GROUNDS

PREPARED BY: M. JOSEPH DATE: OCTOBER 1996

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## Pedestrian Circulation

Pedestrian circulation in the Reflecting Pool area has had a few minor changes since the paths were first laid out. The original plan called for two 15-foot-wide concrete paths situated under the double row of elms, running east to west to serve as the primary pedestrian route along the pools. On the west end of the walkway, two sets of steps brought pedestrians from the lower pool area up to the memorial circle. Sometime before 1964, an additional

path, which ran parallel to the existing concrete walk on the south side, lay on the top of the terraced slope, outside the inner row of trees. The need for this 2-foot wide concrete path may have been based on the proximity of the temporary government buildings constructed on that side in 1942. Documentation indicates that the path along the terrace was removed in the early 1970s.



*Figure 46 – Young elms line concrete walks by Reflecting Pool, May 1929. MRC 2-40.*

Two sets of three 6-foot-wide paths, extending in radial lines from the Rainbow Pool, provided connections to selected points along the main walks on both the north and south sides and promoted circulation around the pool. A concrete plaza area surrounded the Rainbow Pool, which gave visitors a closer vantage point from which to enjoy the fountain display.

Although narrow and not designed or designated for pedestrians, visitors also used the granite coping of the Reflecting Pool as an alternative walkway between the Lincoln Memorial and the Washington Monument.

Access to the Reflecting Pool from the memorial consists of a series of granite steps descending from the circle and adjacent sidewalk down to the pool's western



*Figure 47 - Concrete walks radiating from the Rainbow Pool, April 1933. MRC 2-126.*



edge. The line of these steps continues the line established on the opposite side of the circle by the main approachway leading up to the memorial structure. One broad stairway and two narrow stairs comprise the series. In 1924 a flagstone paver walk, leading from the set of narrow granite stairs and across the grassy strip bordering the pool, connected the descent to the granite coping. These pavers were removed in the 1970s, and in their place a new plaza was installed. As discussed earlier, two other sets of stairs, constructed of concrete, flanked the larger granite series. These steps connected the concrete paths between the double rows of elm trees with the walk around the memorial circle.

A comparison of circulation patterns from the 1920s to those in the 1990s shows relatively few changes. The most significant difference between the two time periods has been the replacement of the concrete surface on the elm walks with asphalt. This change was done in 1971. Other modifications concern the volunteer or social paths that once led from the main walkways to the temporary Navy and Munitions buildings on the north side of the pool and to the temporary government buildings on the south. These paths probably developed during the 1920s and 1940s,



*Figure 48 – Reflecting Pool steps and plaza on west end of pool, November 11, 1996. LINC 11-13.*



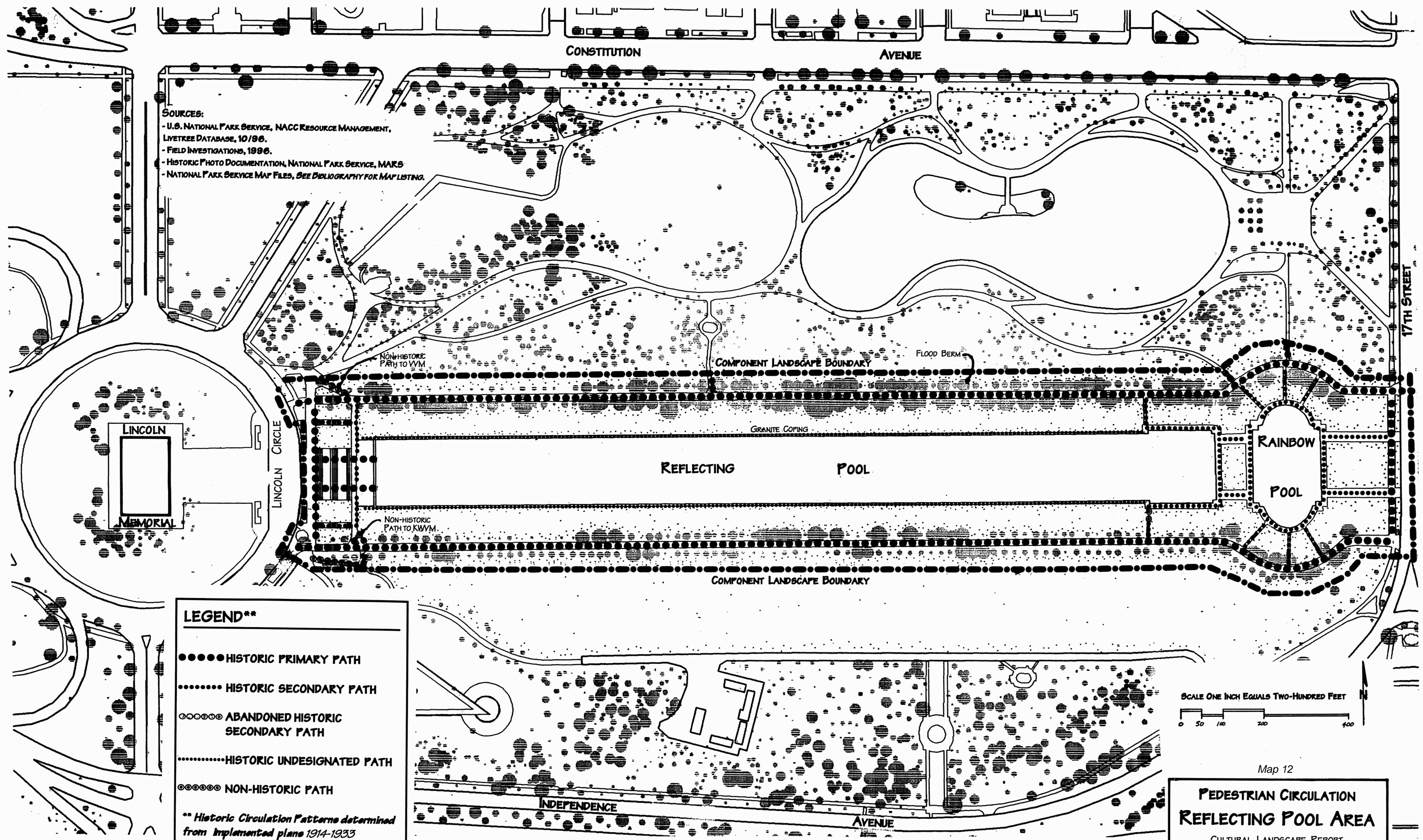
*Figure 49 – Worn path adjacent to granite coping, June 1996. LINC 9-23.*

respectively. When the temporaries were demolished in the 1964 and 1970, some of these pathways remained or were modified to meet the new circulation patterns for Constitution Gardens and the Vietnam Veterans Memorial. Another form of volunteer path has also developed in this area. Joggers and runners have worn dirt tracks on both sides of the paved walks. Joggers' paths have widened the pedestrian corridors along the Reflecting and Rainbow pools beyond the original design intent. Pedestrians have also created a worn path along the granite coping on the north and south sides of the pool. Near the Rainbow Pool, the initial layout of paths have been modified with the removal of one sidewalk. A portion of a paved walk located southwest of the plaza between the Reflecting and Rainbow Pools has been removed. Other additions to the circulation system responded to the need for an accessible route from Lincoln Circle down to the north and south Reflecting Pool walkways. Accessible ramps were installed on the north and south sides, outside of the concrete stairs leading down from the circular drive. See Map 12 *Reflecting Pool area - Pedestrian Circulation* for graphic representation of contributing and non-contributing features.

<p><b>Contributing Features</b></p> <ol style="list-style-type: none"> <li>1. Main paths that parallel the Reflecting Pool</li> <li>2. Secondary paths to Rainbow Pool</li> <li>3. Reflecting Pool steps from Lincoln Circle</li> <li>4. Reflecting Pool granite coping</li> </ol>	<p><b>Noncontributing Features</b></p> <ol style="list-style-type: none"> <li>1. Nonhistoric paths to Korean and Vietnam war memorials</li> <li>2. Nonhistoric paths over flood berm</li> <li>3. Worn paths along main paths that parallel the Reflecting Pool</li> <li>4. Western Reflecting Pool plaza</li> </ol>
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**SOURCES:**

- U.S. NATIONAL PARK SERVICE, NACC RESOURCE MANAGEMENT, LIVETREE DATABASE, 10/1986.
- FIELD INVESTIGATIONS, 1986.
- HISTORIC PHOTO DOCUMENTATION, NATIONAL PARK SERVICE, MARS
- NATIONAL PARK SERVICE MAP FILES, SEE BIBLIOGRAPHY FOR MAP LISTING.

**LEGEND\*\***

- HISTORIC PRIMARY PATH
- ..... HISTORIC SECONDARY PATH
- - - - - ABANDONED HISTORIC SECONDARY PATH
- HISTORIC UNDESIGNATED PATH
- NON-HISTORIC PATH

**\*\* Historic Circulation Patterns determined from implemented plans 1914-1933**

SCALE ONE INCH EQUALS TWO-HUNDRED FEET  
0 50 100 200 400

Map 12

**PEDESTRIAN CIRCULATION  
REFLECTING POOL AREA**

CULTURAL LANDSCAPE REPORT  
LINCOLN MEMORIAL GROUNDS  
PREPARED BY: M. JOSEPH DATE: OCTOBER 1996

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## Structures

For the purposes of this report, the Reflecting Pool, Rainbow Pool and stairs down to the pools, are all considered structural features.

The McMillan Commission's plans for the Reflecting Pool show a cruciform shape, with the cross arms of the pool outlined by double rows of deciduous trees. In addition, a larger, squared-off form was designed for both the eastern and the western end of the Reflecting Pool. During the planning phase, the cross arms were temporarily eliminated and only the "jog" at the east end was incorporated into the final drawings. Frederick Law Olmsted, Jr. had urged the Commission of Fine Arts to modify the older plan in favor of a less ornate and a more simplified basin. Furthermore, the presence of the Navy and Munitions buildings on the north side of the Reflecting Pool prohibited the implementation of the cruciform plan on this side. The outline of the smaller pool had a more ornate design that was defined by a rectangle with two half circles on the north and south ends. The forms of both the Reflecting and the Rainbow Pools have remained intact since their construction was completed in 1924. However, continuous improvements in the waterproofing, as well as regular cleaning and maintenance have been necessary over the years. The waterproofing material was first replaced in 1929. Since 1981 the park service has attempted to reduce levels of maintenance by using an ecological program to manage the pools.



*Figure 50 – Rainbow Pool fountain display, April 20, 1934. Photo by Kelly. MRC 2-108.*

Fountains were installed in the smaller pool, in 1924. An oval pattern of 124 nozzles sprayed approximately 25 feet in the air towards the middle of the pool creating a rainbow affect on sunny days. In addition to these jets, two other clusters of nine jets on the north and south side of the pool towered above forming a fountain 40 feet high. A year later, the Commission of Fine Arts inspected the fountain and indicated that the fountain's height and intensity of spray obscured the views to the Lincoln Memorial and Washington

Monument. A series of tests were conducted in 1934 to determine the most appropriate and effective display and to meet the CFA's requirements. In 1990 some of the nozzles were replaced with a straight head type. It is unknown if this has altered the jet display that was originally approved by the Commission of Fine Arts in the 1930s. Currently only the two clusters of jets on the north and south side of the pool are operating and the oval pattern on the outer edge of the pool is not used. Because of this the fountain no longer sprays at the height required to exhibit a rainbow effect but instead appears as a weak imitation of the past display.



**Figure 51 – Rainbow Pool fountain as it appeared on November 11, 1996. LINC 11-10.**



**Figure 52 - Temporary structures on grassy terrace by Reflecting Pool steps, November 11, 1996. LINC 11-22.**

the plaza at the top of the granite stairs. These are owned by vendors who have obtained a special use permit to sell t-shirts and other products under a First Amendment ruling. To reduce the impact on cultural and natural resources the NPS has tried to limit where the vendors operate. The unsightly tents obscure the view along east/west axis from the memorial, the approachway, and the Reflecting Pool. See Map 13 *Reflecting Pool area - Structures* for location of structural features.

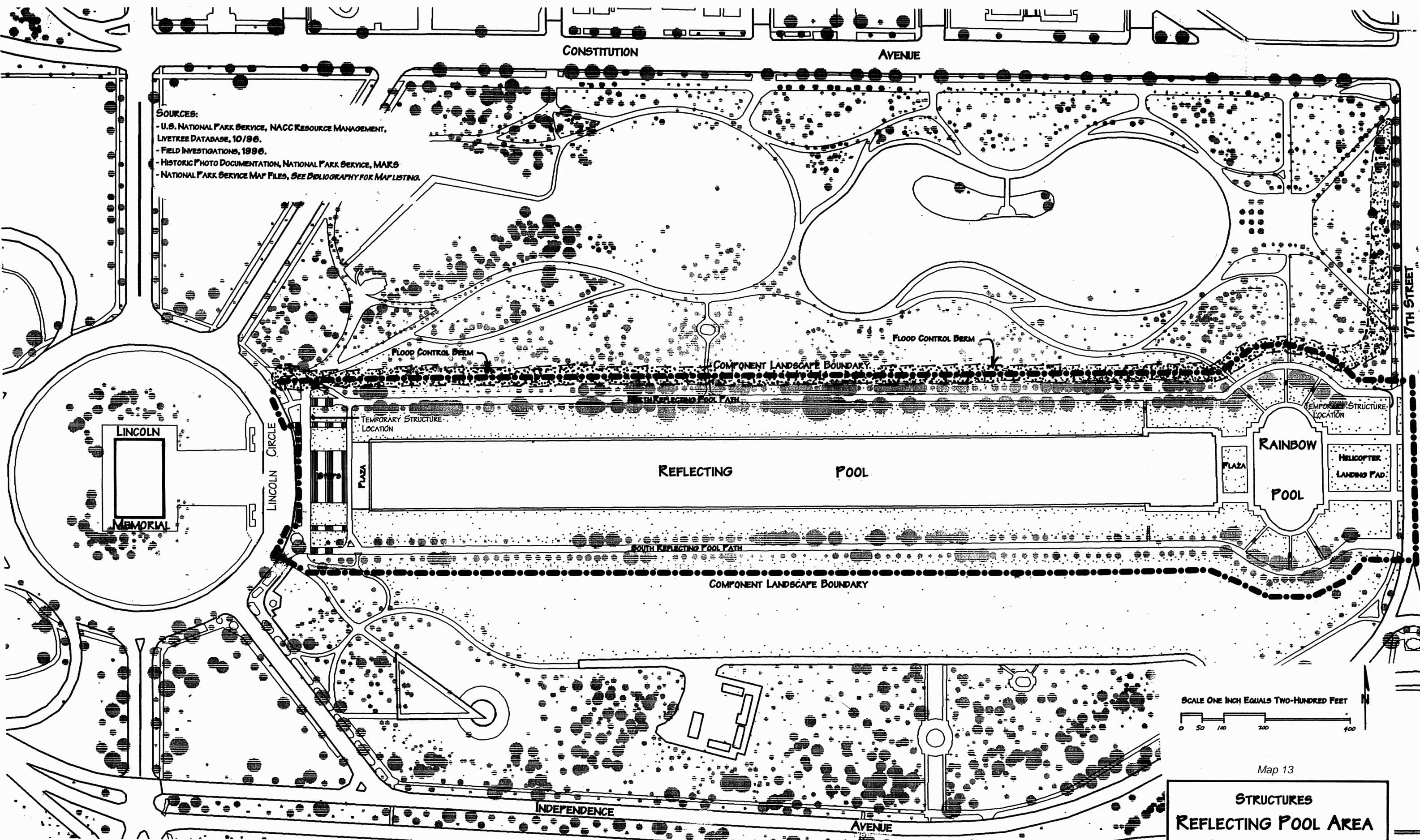
Another structural feature is the Reflecting Pool stairs. These wide stairs of granite and cobblestone panels were completed in 1922 at the same time as the stepped approachway leading to the Lincoln Memorial. Although the circular roadway separates the two series of stairs, they are visually connected by their alignment on the east/west axis and by their comparable use of materials and design. The park service enlarged the plaza area at the base of the steps in 1970 by removing the flagstone walks, installed in 1924, and by installing new concrete walks and cobblestone panels with granite block edging that extended from the steps to the edge of the pool coping. This construction is the only substantial addition to the original structural fabric. Once the current rehabilitation of the approachway to the memorial building is completed, the concrete and cobblestone patterns at the Reflecting Pool steps will compare unfavorably in their present broken and patched condition.

In addition to the main structural features of the Reflecting Pool area, there are temporary structures located both north of the Rainbow Pool and in the northwest corner of

<b>Contributing Features</b> 1. Reflecting Pool 2. Rainbow Pool 3. Reflecting Pool steps	<b>Noncontributing Features</b> 1. Temporary structures for use by vendors
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SOURCES:  
- U.S. NATIONAL PARK SERVICE, NACC RESOURCE MANAGEMENT, LIVETREE DATABASE, 10/86.  
- FIELD INVESTIGATIONS, 1986.  
- HISTORIC PHOTO DOCUMENTATION, NATIONAL PARK SERVICE, MARKS  
- NATIONAL PARK SERVICE MAP FILES, SEE BIBLIOGRAPHY FOR MAP LISTING.

SCALE ONE INCH EQUALS TWO-HUNDRED FEET  
0 50 100 200 400

Map 13

**STRUCTURES**  
**REFLECTING POOL AREA**

CULTURAL LANDSCAPE REPORT  
LINCOLN MEMORIAL GROUNDS  
PREPARED BY: M. JOSEPH DATE: OCTOBER 1986

**back of map 13**



## Small-Scale Features

**Benches.** In the Reflecting Pool area, the earliest photographs show benches spaced evenly, approximately 50 feet apart, along the walkways and underneath the outer row of trees in the double rows of elms. A few benches were also placed under the inner rows of trees. All of the benches were situated facing the Reflecting Pool. Groups of benches were also placed around the Rainbow Pool for viewing the fountain in the summer months and for the use of ice skaters in the winter. The benches appear to have been moveable and not permanently mounted. The type of bench utilized during the 1920s and 1930s is similar to the present bench, a cast iron frame with a wooden slat seat and back. However, the smaller number of benches found along the walks today and their permanent, fixed positions reflect the change in contemporary uses. These changes include the removal of benches from around the Rainbow Pool and the reorientation of all seating underneath the inner rows of trees away from the Reflecting Pool, toward the walkways, facing the opposite benches under the outer rows of trees.



**Figure 53 – Cast iron frame benches placed along elm walks, May 1929. MRC 2-48.**



**Figure 54 – Cast iron frame benches and tulip trash receptacles used today along elm walks, November 11, 1996. LINC 11-12.**

Contributing Feature	Noncontributing Feature
1. Cast-iron frame wooden slat bench	1. Arrangement and overall number of benches

**Trash Receptacles.** A limited number of trash receptacles were originally placed around the Reflecting Pool area. Photo documentation shows that a wire mesh trash can, placed directly on the ground, may have been the first type used. By 1964, the Park had introduced the wood and steel “tulip” style trash can. Although the *Streetscape Manual* recommends that a tulip style trash can for general refuse and one for recyclables be placed on each side of every bench, this arrangement has not been followed. There is an inconsistency in the spacing, and number of trash receptacles per bench, and it appears to be haphazard placement. Even though there is not the recommended number of trash cans along the walks, there still are twice as many receptacles as benches lining the main walks along the Reflecting Pool.

Contributing Feature	Noncontributing Features
	<ol style="list-style-type: none"> <li>1. Tulip style trash can</li> <li>2. Tulip style recyclable can</li> </ol>

**Lighting.** Original plans did not designate lighting for the walkways and the Reflecting Pool. In 1935, temporary flood lights were set up at the eastern end and along the south side of the pool for night ice skating. “Twin-Twenty” lamps and posts, the double globe streetlight located along all major streets between the Capitol and the Potomac, were placed along the 17<sup>th</sup> Street corridor between Constitution Avenue and the Tidal Basin in the 1930s. The only lighting provided for the pool area is that coming from the “twin-twenty” globes on 17<sup>th</sup> Street and from lights adjacent to the study area.

Lack of direct lighting around the pools accentuates their reflective quality. Because of the subdued effect, the reflection of the Lincoln Memorial and the Washington Monument at night is both a breathtaking and memorable experience. Light emanating from the memorial, which was first lit from the inside in 1929, and from the grounds of the Washington Monument reinforce the structures as focal points and provide the soft light for the pools. The contrast in light also underscores the visual relationship between the memorial and the monument. Exterior lighting for the Washington Monument was installed by 1931, while exterior lighting at the Lincoln was developed in 1969.<sup>86</sup>



*Figure 55 - Reflecting Pool area devoid of lights. View from Washington Monument, April 1941. MRC 3-28.*

Contributing Features	Noncontributing Features
<ol style="list-style-type: none"> <li>1. Twin-Twenty lamppost along 17<sup>th</sup> Street</li> </ol>	

**Paving Materials.** The walkways on the north and south sides of the pools were initially constructed of concrete. Photo documentation shows evidence of a square control joint pattern in the walks, which may have been planned to add design interest to the surface. Sometime in the

late 1960s the northern walk was repaved with bituminous asphalt instead of the concrete. To make the paving consistent, the southern walkway was also repaved in 1974 with asphalt. Pavement around the Rainbow Pool and on the walks leading to this area required repair at this time as well, but the concrete material paving was retained. The sidewalk along 17<sup>th</sup> Street, east of the Rainbow Pool, was changed early in 1991, when the National Park Service replaced the concrete walk and curb with an exposed aggregate concrete paving and granite curb as specified in the *Streetscape Manual*. At the west end of the Reflecting Pool, the 1971 paving had used the same construction techniques used for the cobblestone panels on the main approachway steps, but had substituted concrete for granite in the area around the panels. Square pattern control joints were also designed for the area between the pool and the base of the Reflecting Pool steps. Individual granite block pavers were added along the inner side of the concrete steps leading to the main walkways to control erosion from dirt trails worn along the sides.

<b>Contributing Features</b> 1. Concrete paving around Rainbow Pool	<b>Noncontributing Features</b> 1. Asphalt paving for main allee path 2. Western Reflecting Pool plaza with cobblestone panels.
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**Drinking Fountains.** Original plans did not call for drinking fountains in this area, however, three accessible drinking fountains are near the Reflecting Pool. Two are along the northern walk north of the Rainbow Pool and one is southwest of the Reflecting Pool along the southern walk. Other fountains are nearby at the adjacent playing fields on the south and near the Vietnam Veterans Memorial and Korean War Veterans Memorial.

<b>Contributing Features</b>	<b>Noncontributing Features</b> 1. Haws drinking fountain
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**Signs.** In the Reflecting Pool area, the park has placed four large interpretive signs (two on each side) that describe the Reflecting Pool. The large metal signs (white lettering on brown background) block the view of the feature they are describing and are out of scale with the surrounding landscape. New interpretive signs are proposed for this area and will be a low-profile, tamper-resistant type, wayside.



**Figure 56 - Oversized interpretive signs by the Reflecting Pool, November 11, 1996. LINC 11-16.**

<b>Contributing Features</b>	<b>Noncontributing Features</b> 1. Reflecting Pool interpretive sign
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***Pedestrian Barriers.*** In pedestrian areas, three different types of barriers are used within the Reflecting Pool area: stake-and-rope; snow fence; and chain-link fence. Park maintenance has installed these fences for a variety of reasons but mostly for the control of visitor circulation. The stake and rope and/or snow fence provide temporary protection of newly seeded areas and control circulation during special events. Also the stake-and-rope appears to be a permanent feature around the Rainbow Pool, which marks a secure area around a helicopter landing pad on a grassy panel between 17<sup>th</sup> Street and the Rainbow Pool. Other temporary barriers are used seasonally, such as the chain-link fence, to prevent visitors from walking on newly seeded areas along the Reflecting Pool or to prevent visitors from entering the fireworks staging area in the Rainbow Pool area.



***Figures 57 & 58 - Temporary snowfencing installed along pedestrian corridors to protect grass areas. Stake and rope installed on the flood berm to mark secure area for landing pad, November 11, 1996. LINC 11-11 & LINC 11-14.***

<b>Contributing Features</b>	<b>Noncontributing Features</b> 1. All types of traffic and pedestrian barriers
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## Lincoln Memorial circle and radial roads

### Vegetation

**Radial roads and outer circle.** In consultation with the Commission of Fine Arts and Frederick Law Olmsted, Jr (who was then serving on the Commission of Fine Arts) C.E. Howard, the landscape architect working for the Office of Public Building and Grounds, developed a tree planting plan for the area around the outside of the memorial circle and for the radial roads. The radial roads were eventually named 23<sup>rd</sup> Street NW, 23<sup>rd</sup> Street SW, Bacon Drive, and French Drive, with the two drives commemorating both the memorial's architect and the sculptor of the Lincoln statue. The 1916 plan featured a double row of trees, planted in opposite positions, on both sides of the radial roads. For the outer circle, the plan showed a single circular band of trees next to the circle in the grassy strip between the roadway and the sidewalk. Outside the sidewalk, four bands of trees were to be planted as though in concentric circles. However, in the second circular band, an incomplete curve of trees was indicated, which left a gap between the first and third band of trees.



*Figure 59 - Aerial view of first phase of planting American elms along the radial and eastern side of Lincoln Circle, 1927. MRC 1-54.*

When the first phase of the plan was implemented in the 1920s in the area east of 23<sup>rd</sup> Street, American elms (*Ulmus americana*) had been selected for the planting. Many trees were planted as “memorial trees” dedicated to outstanding individuals or groups as a living memorial. At that time, the proposed double row of oppositely planted trees on the radial roads was scaled back to planting in alternate positions, which reduced the number of trees and the density of the vegetation. The circular band of trees was followed

for the eastern half of the circle. During the second phase in the 1930s, designers made minor changes to the 1916 scheme for the western portion of the outer circle. A single circular band edged the curb, but instead of a quadruple band of elms, they called for a less dramatic double band to complete the circular design.



One other area beyond the memorial circle, the Ericsson Memorial site, received its own landscape treatment. When the Ericsson site was completed at the terminus of 23<sup>rd</sup> Street SW in 1932, the granite platform for the statue and the four sets of steps radiating out from the base, were enhanced with conifers. Three types of junipers (*Juniperus horizontalis*, *Juniperus sabina* var. *tamariscifolia*, *Juniperus squamata* 'Meyeri'), each displaying different growth habits, were planted.



**Figure 60 - Ericsson Memorial and newly planted junipers around base, c. 1932. MRC 1-136.**



**Figure 61 - Remnant concentric row of elms around Lincoln Circle, between 23rd Street NW and Bacon Drive, March 1996. LINC 6-27.**

Since the National Park Service's stewardship began in 1933, it has attempted to maintain the original planting plan for the radial roads. Because Dutch elm disease (DED) has killed many American elms around the Lincoln Memorial, disease-resistant varieties have been planted to replace quite a few original trees. Although the number of mature trees growing along the radial roads varies, the spreading canopy of these trees remains an effective design element in the landscape.

Unlike the radial roads, the original planting pattern around the outer circle is almost entirely lost. Only a few remnant elms remain to suggest the old design. While the quadruple band on the eastern part of the circle is evident between 23<sup>rd</sup> Street NW and Bacon Drive and 23<sup>rd</sup> Street SW and French Drive, the areas between the two drives and the Reflecting Pool no longer show any evidence of the old tree pattern. In these two areas, the distinctive landscape plans for Constitution Gardens and Korean War Veterans Memorial have encroached upon the old concentric design for the elms. Here newer plantings of native understory trees are clustered beneath a mixed



canopy of oaks, zelkovas, and maples (*Quercus* sp., *Zelkova serrata*, *Acer* sp.). The development of these other sites with such different plant selections has significantly altered the character of the overall design for the Lincoln Memorial grounds and has compromised the integrity of the original plan. West of 23<sup>rd</sup> Street, only a remnant of the old double band of elms is in place. The single circular band of elms between the 23<sup>rd</sup> Street NW west to the Watergate area is entirely lost because of the realignment of the outer circle curb for the 1940s on-ramp road. However, the single circular band of trees between the roadway and the sidewalk is mostly intact for the southwestern portion of the outer circle.

The only significant alteration to the original landscape plan occurred in 1953 when the outer edge of the circular roadway near the sidewalk above the Reflecting Pool was changed. Here a rectangular curb cut was eliminated, the circle was made continuous, and a pair of planting beds were installed on the north and south side of the sidewalk in the areas formerly shaped by the old squared-off curb. The park appears to have planted dwarf boxwood in the beds, which were replaced in 1977 with a little leaf holly, also known as inkberry (*Ilex glabra*.) At subsequent intervals, the park replaced the inkberry with Japanese hollies (*Ilex crenata*.) which occupy the planting bed today.

Around the Ericsson Memorial, the planting plan was changed substantially. Japanese holly replaced the original junipers, which once encircled the granite platform. Four walks, which radiated from the granite platform, also were lined with junipers, but these shrubs were also removed and now the walks are surrounded by grass. These changes have further downplayed the connection of the Ericsson Memorial to the Lincoln Memorial landscape.



**Figure 62 - Inappropriate trees and shrubs, planted under canopy of American elms, November 11, 1996. LINC 11-27.**



**Figure 63 - Shrub planting at top of Reflecting Pool steps, December 1996. LINC 17-35.**









**Figure 64 – Replacement shrubs around Ericsson Memorial changes the character of the original planting, February 1997. LINC 18-8.**

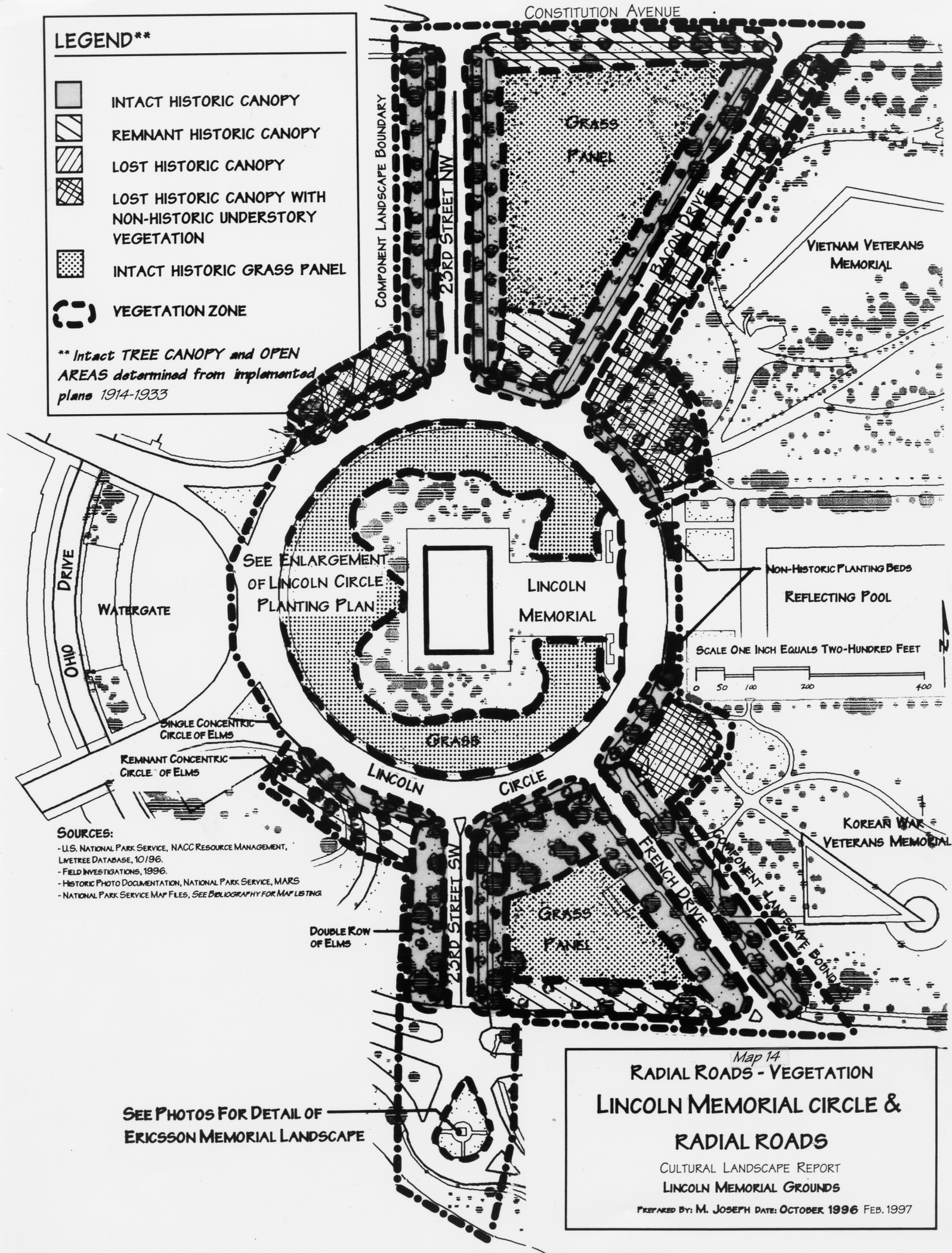
The radial roads and outer circle vegetation is segmented into zones which define the spatial composition of the tree canopy and location of the open grassy areas. By breaking the landscape features into smaller units, there is a better sense of the integrity from the original plan. See Map 14 *Radial Roads - Vegetation* for graphic representation.

<b>Contributing Features</b>	<b>Noncontributing Features</b>
<ol style="list-style-type: none"> <li>1. Rows of American elms along radial roads</li> <li>2. Remnant circular band of American elms around Lincoln Circle</li> <li>3. Grass panels surrounded by rows of elms</li> <li>4. Grass island surrounding Ericsson Memorial</li> </ol>	<ol style="list-style-type: none"> <li>1. Shrub planting bed at top of Reflecting Pool steps</li> <li>2. Understory vegetation between Bacon Drive and the Reflecting Pool and French Drive and the Reflecting Pool</li> <li>3. Japanese holly (<i>Ilex crenata</i>) planted around Ericsson Memorial</li> </ol>

## LEGEND\*\*

-  INTACT HISTORIC CANOPY
-  REMNANT HISTORIC CANOPY
-  LOST HISTORIC CANOPY
-  LOST HISTORIC CANOPY WITH NON-HISTORIC UNDERSTORY VEGETATION
-  INTACT HISTORIC GRASS PANEL
-  VEGETATION ZONE

\*\* Intact TREE CANOPY and OPEN AREAS determined from implemented plans 1914-1933



**Inner Circle.** In contrast to the radial roads, plans developed for the area immediately inside the circle used a variety of broadleaf evergreen shrubs and trees as foundation plantings for the memorial building. Since the structure had been constructed on a raised terrace and elevated some 14 feet above grade, vegetation was needed to both soften the edge of the granite walls of the raised terrace and to provide large masses of green at the base of the wall. These schemes were developed to bring the building more in scale with its surrounding landscape.



**Figure 65 - East side of Lincoln Memorial showing mature boxwood and yew shrubs, 1935, by Orren R. Loudon. Used by permission from the National Geographic Society.**

The first approved plan from 1920 showed plantings for the inner circle concentrated on the front, or east, side of the building, with a few shrubs along the north, south, and west sides. On the east side of the inner circle, two rectangular planting beds, each containing a granite bench and surrounded on three sides by walls of granite block, framed the entry to the memorial approachway. Two mature dwarf boxwood (*Buxus sempervirens* 'Suffruticosa') shrubs were planted within each of the walled beds beside the benches. Behind the benches a short dwarf box hedge served as a backdrop. An additional mature dwarf boxwood was placed adjacent to the far, outside wall of each planting bed. Behind the entry planting beds, hedges of dwarf boxwood lined the outer edges of the pavement along the entire length of the approachway. To accentuate the grade changes that occurred in the approachway, the design called for a larger dwarf boxwood to be placed adjacent to the successive sets of steps that marked each change in level. At the base of the raised terrace wall, groups of common boxwood (*Buxus sempervirens*) and English, Canadian, and Japanese yew (*Taxus* sp.) were planted. In addition to these massings, dwarf boxwood were planted in front of some the groups. The corners of the raised terrace wall were emphasized on the northeast and southeast with plantings extending out from the wall into



the grass lawn of the circular terrace. On the north and south sides, more openly planted specimens of American holly (*Ilex opaca*), common boxwood and English yew, were added to provide some greenery until a second planting phase could be completed. A mass planting of mugo pine (*Pinus mugo*) were added at the midpoints along the north and south sides where the transition between the first and second phase plantings would eventually occur. Another temporary measure included planting vines at the base and at the top of the raised terrace wall to quickly “green-up” a background for the less densely planted areas around the structure, especially on the west side.



**Figure 66 - West side or rear of Lincoln Memorial showing newly planted foundation plantings, c. 1932. MRC 2-20.**

The design in the second approved plan from 1931 was primarily for the rear of the memorial. Several broadleaf evergreen trees were selected for this side to supplement the overall planting and to create a different effect than that on the front. In addition to common box and dwarf box, American holly, and southern magnolia (*Magnolia grandiflora*) were used to complete the palette. To anchor the rear, magnolias were strategically sited, American hollies were intermixed near the magnolias and common and

dwarf boxwood were massed in front of them. This arrangement also projected into the rear lawn area, at the corners of the raised terrace wall, as it did in the front. According to the plan, an area located at the mid-point along the rear side of the raised terrace wall was to be free of planting, leaving an opening in the vegetation and an unobstructed view from the top of the raised terrace out to the river and toward the Virginia shoreline.

Replanting around the memorial occurred in 1936 to replace failing shrubs, mostly boxwood, and to add additional dwarf boxwood groupings on the front. At this time the south side of the approachway was replanted with a new dwarf boxwood hedge, while on the north selected dwarf box replacements were made. A second effort to replace diseased and dead plants occurred in 1944. This plan proposed the removal of the boxwood hedge on both sides of the approachway. A combination of a low yew hedge and eight larger yews to accent, like the boxwood before, the grade changes at the different sets of steps were to be planted instead. Based on photo documentation, the eight larger yews were never planted, and only the low yew hedge was planted to replace the previous boxwood hedge. Another significant change was the removal of the mugo pines, which had been growing on the north and south sides of the raised terrace wall. The pines were replaced by *Taxus cuspidata* 'Nana,' a more horizontal growing yew species.

In 1976, the existing yew hedge was removed and replanted once again with a more compact variety, *Taxus x media* 'Densiflora.' In addition to this replanting, several dwarf boxwood were removed from the front and transplanted to other undocumented locations around the building. Twelve yews were added to screen ground-level floodlights, located on either side of the approachway. During the late 1970s, 35 additional dwarf boxwoods, seven American hollies, and 22 yews were planted in unspecified areas around the building as replacements or filler plantings.

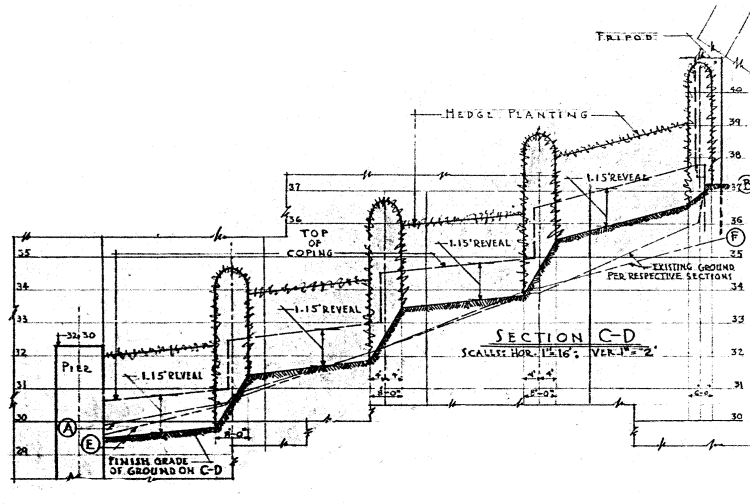


Figure 67 - Section showing desired character of replacement hedge along approachway, 1944. NPS Map 801/80347.

From the early 1930s to the 1980s, the front planting beds have been replanted several times. In the early years the dwarf boxwoods were replaced in-kind when they died. Sometime in the 1960s the low boxwood hedge was removed and replaced with a Japanese holly hedge. In 1976 the low holly hedge was replaced with original species, the dwarf boxwood. In a subsequent plan from 1977, the boxwood were proposed to be removed from the front planters and replaced with inkberry (*Ilex glabra*). It is not known if this change ever occurred. By 1994 the entire bed consisted of Japanese holly (*Ilex crenata*) edged with lilyturf (*Liriope spicata*). All the shrubs were removed during the 1995-1996 rehabilitation of the approachway and replaced in-kind in 1996.

The trees and shrubs surrounding the memorial currently exhibit different degrees of health and reflect a range of growing conditions. Along the front or east side, the plantings have suffered greatly from the effects of repeated construction activity and preparation for large-scale public events that have occurred in this area over time. The 1995-96 construction on the approachway has caused further damage to the foundation plantings. The lack of routine maintenance and regular pruning has also caused some of the plantings to appear ragged or



Figure 68- Existing west side foundation plantings, July 23, 1996. LINC 10-17.



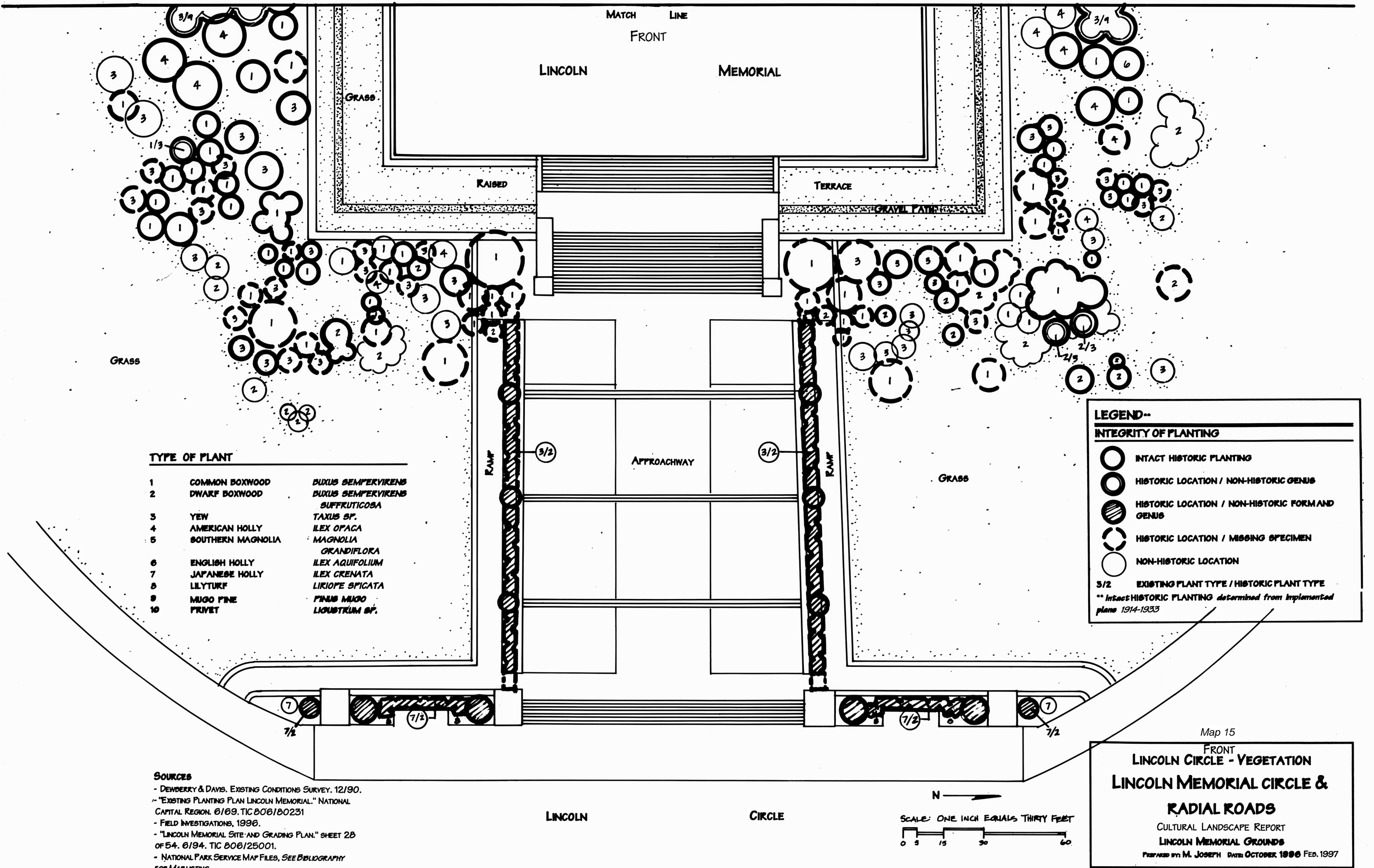
overgrown. When the park revised the original plans by replacing the boxwood hedges with yews in 1945, they altered the character of the entry planting, yet retained some of the historic integrity by keeping a band of green hedge growing on both sides of the approachway. However, the addition of an American holly and the Japanese hollies to the front side and massings of yews to screen floodlights have further compromised the character of the planting design. Because replacement plantings have deviated from the original design, the landscape on the front side retains a lower degree of integrity. On the sides and rear of the memorial, the integrity of the plantings is mostly intact, although some boxwood planted near the magnolias and close to the raised terrace have been shaded out and are unhealthy, or have died. At the midpoint of the north and south sides, two thick masses of *Taxus cuspidata* 'Nana' provide the horticultural transition between the character of the two different planting areas. Even though these yews were planted to replace the original mugo pines, the design intent of keeping a lower growing conifer mass in this area is still evident. In other areas overgrown plant material, like some American hollies that were planted on either side of the horizontal-growing yew mass on the north face of the memorial, are encroaching upon the designed opening above the raised terrace. See Map 15 and Map 16 *Lincoln Circle - Vegetation* for the graphic representation of the front and back plantings.



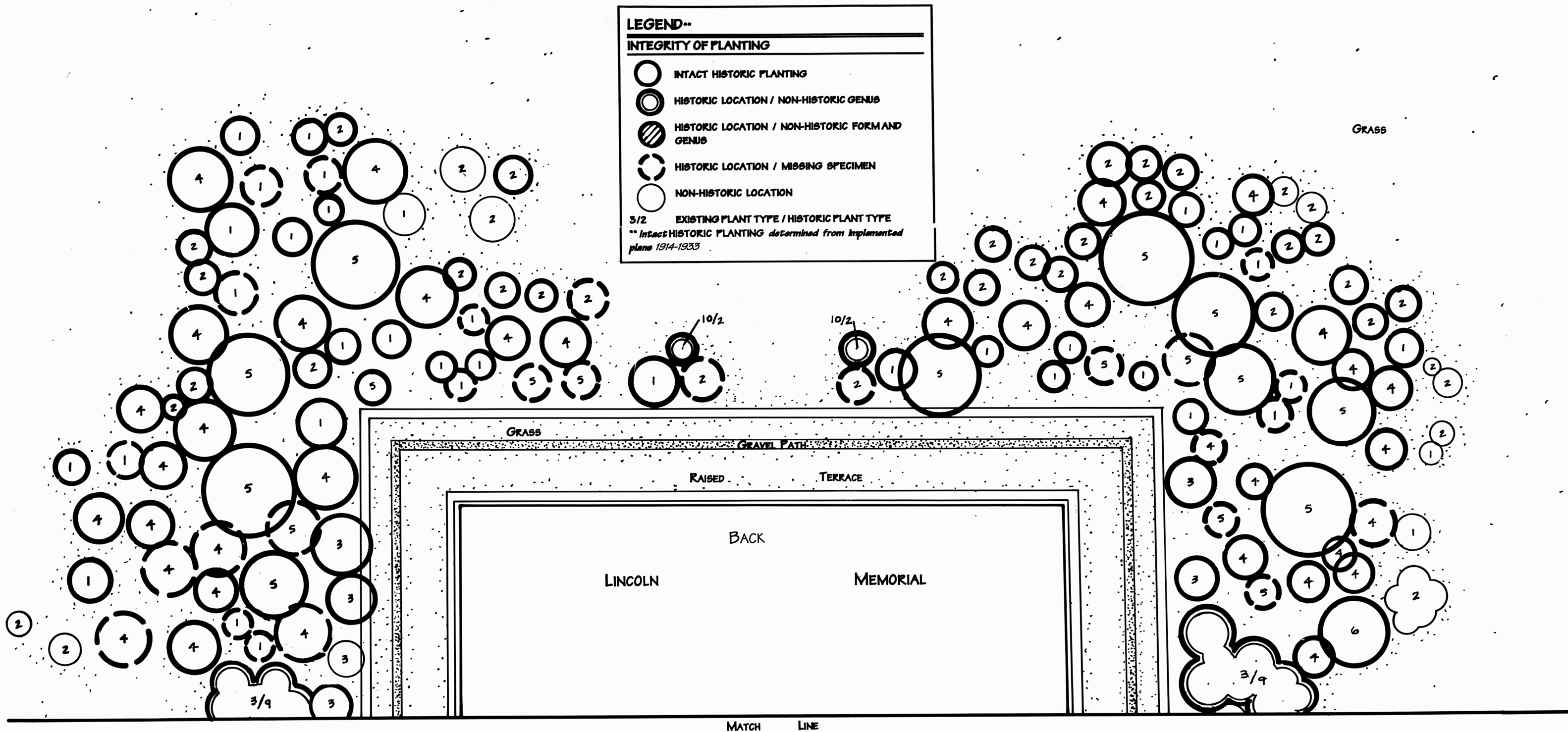
*Figure 69 - Existing yew hedge along approachway and accessible ramp, January 3, 1997. LINC 16-21.*

<b>Contributing Features</b>	<b>Non-Contributing Features</b>
<ol style="list-style-type: none"> <li>1. Intact historic planting around Lincoln Memorial</li> <li>2. Grass on raised terrace</li> <li>3. Grass on inner circle</li> </ol>	<ol style="list-style-type: none"> <li>1. Nonhistoric form and genus of planting around Lincoln Memorial</li> <li>2. Nonhistoric location of planting around Lincoln Memorial</li> </ol>





back of map 15

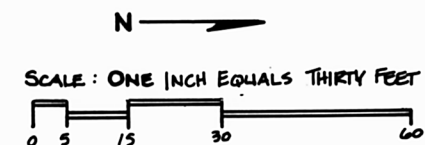


#### TYPE OF PLANT

1	COMMON BOXWOOD	<i>BUXUS SEMPERVIRENS</i>
2	DWARF BOXWOOD	<i>BUXUS SEMPERVIRENS</i> <i>SUFFRUTICOSA</i>
3	YEW	<i>TAXUS SP.</i>
4	AMERICAN HOLLY	<i>ILEX OPACA</i>
5	SOUTHERN MAGNOLIA	<i>MAGNOLIA</i> <i>GRANDIFLORA</i>
6	ENGLISH HOLLY	<i>ILEX AQUIFOLIUM</i>
7	JAPANESE HOLLY	<i>ILEX CRENATA</i>
8	LILYTURF	<i>LIKIOPE SPICATA</i>
9	MUGO PINE	<i>Pinus mugo</i>
10	PRIVET	<i>LIGUSTRUM SP.</i>

#### SOURCES

- DEWBERRY & DAVIS. EXISTING CONDITIONS SURVEY. 12/90.
- "EXISTING PLANTING PLAN LINCOLN MEMORIAL." NATIONAL CAPITAL REGION. 6/69. TIC 806/80231
- FIELD INVESTIGATIONS, 1996.
- "LINCOLN MEMORIAL SITE AND GRADING PLAN." SHEET 28 OF 54. 6/94. TIC 806/25001.
- NATIONAL PARK SERVICE MAP FILES, SEE BIBLIOGRAPHY FOR MAP LISTING.



Map 16

### BACK LINCOLN CIRCLE - VEGETATION LINCOLN MEMORIAL CIRCLE & RADIAL ROADS

CULTURAL LANDSCAPE REPORT  
LINCOLN MEMORIAL GROUNDS

PREPARED BY: M. JOSEPH DATE: OCTOBER 1996 FEB. 1997

back of map 16



## Circulation

### *Vehicular Circulation.*

Traffic around the circle has been a concern since the circular roadway was opened to automobiles in the 1920s. Initially automobile traffic had access to Lincoln Circle, 23<sup>rd</sup> Street NW, Bacon Drive, French Drive, and 23<sup>rd</sup> Street SW. From B Street (Constitution Avenue) on the north and a service road on the south (the west bound lanes of Independence Avenue uses a portion of this older road), the two-way radial roads, connected to the one-way, counter-clockwise traffic around Lincoln Circle. When Arlington Memorial Bridge and its approaches were completed in 1932, and Rock Creek and Potomac Parkway was completed in 1936, the number of commuter routes for workers driving into the city increased and the volume of traffic rose dramatically. In the 1940s the construction of Independence Avenue through West Potomac Park created another vehicular connection. Increases in traffic and speeds of automobiles around Lincoln Circle lead to the decision to temporarily close the roadway to through-traffic between Bacon and French Drives during the height of the tourist season in 1972. This measure was taken to provide a safer crossing for visitors walking from the Reflecting Pool area to the approachway to the Lincoln Memorial. By closing a portion of the circle, the one-way counter-clockwise circulation was changed to two-way traffic between the Memorial Bridge approach and Bacon Drive.



*Figure 70 - Rush hour traffic around Lincoln Circle, c. 1944. MRC 2-4.*



*Figure 71 - Traffic congestion on French Drive and Lincoln Circle, March 1996. LINC 6-34.*

The portion between Memorial Bridge and French Drive remained one-way. In 1976 all vehicular traffic between 23<sup>rd</sup> Street SW and French Drive, with the exception of tour buses and taxis were permanently restricted from the circle. Jersey barriers and planters were placed to prevent vehicles from using the previous the route (See *Lincoln Memorial circle and radial roads – Small-Scale features – Traffic and Pedestrian Barriers* section for more information on these features).

Changing the circulation patterns around the circle had both a positive and negative impact on the site. By restricting vehicular access to the circle between Bacon and French Drives, park officials provided visitors a safer crossing point from the Reflecting Pool area and the memorial. But by closing part of the circle, all the traffic was concentrated on the western side, which created additional difficulties and hazards for pedestrians crossing the road from the inner circle to the Watergate plaza area. See Map 17 *Lincoln Memorial circle and radial road - Vehicular Circulation* for graphic representation of contributing and noncontributing features.

<b>Contributing Features</b>	<b>Noncontributing Features</b>
<ol style="list-style-type: none"> <li>1. Lincoln Circle</li> <li>2. 23<sup>rd</sup> Street NW</li> <li>3. 23<sup>rd</sup> Street SW</li> <li>4. Henry Bacon Drive</li> <li>5. Daniel Chester French Drive</li> <li>6. Constitution Avenue</li> </ol>	<ol style="list-style-type: none"> <li>1. Independence Avenue</li> <li>2. Clockwise direction of traffic on Lincoln Circle</li> <li>3. Limited access on French Drive and Lincoln Circle</li> </ol>

**Parking Areas.** West Potomac Park has always had a limited number of parking spaces in the areas surrounding the memorials and the Washington Monument. Onstreet parking is not only limited in the Lincoln Memorial study area, but also is restricted around the circle and the radial roads. Although a few spaces once existed on the circle where the outer curb line was squared by the design of the Reflecting Pool steps (these had never been designated for automobiles during the initial or subsequent planning). However photo documentation indicates longstanding use of this area in front of the memorial for diagonal and, later, parallel parking. In 1953 the squared curb edge was removed to create a continuous circular curb around the outside of the roadway.



**Figure 72 - Unofficial parking area at top of Reflecting Pool steps and Lincoln Circle, 1929. Used by permission from the National Geographic Society.**



**Figure 73 - Bus and taxi drop off along French Drive, July 23, 1996. LINC 10-14.**

The curb change displaced that small parking area.

To accommodate public transportation services, areas were designated for a taxi stand and for local bus stops around the Lincoln Memorial area in the 1930s. The exact location of these dropoffs have yet to be determined. However, the taxis stand was probably at the southeast side of the circle's inner curb.

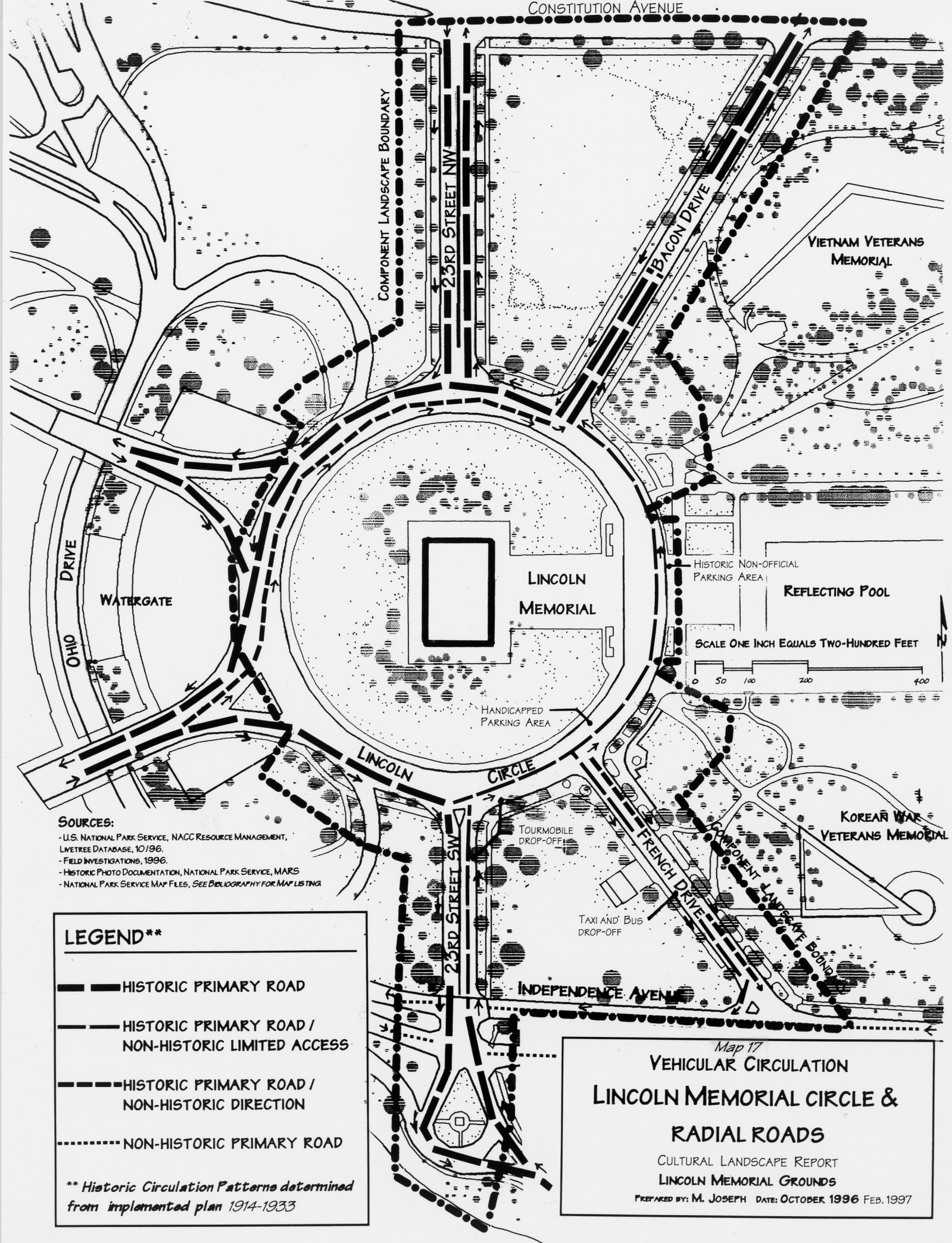
During the 1932 development of Arlington Memorial Bridge, the bridge commission proposed a parking area between 23<sup>rd</sup> Street SW and French Drive near the Ericsson Memorial. The lot was never installed. The construction of Independence Avenue through the proposed location in the 1940s prevented any further implementation of such a plan.

Parking remains a critical problem, as it was during the early development of the area. Along the southeastern portion of the circle's inner curb, eight handicap parking spaces have been designated. "Tourmobile" stops are on the outer curb of the circle, between 23<sup>rd</sup> Street SW

and French Drive and along the eastern side of 23<sup>rd</sup> Street SW. Other tour buses and taxis are directed to French Drive for all dropoffs and pickups, making this area very congested. See Map 17 *Lincoln Memorial circle and radial roads - Vehicular Circulation* for location of parking areas.

<b>Contributing Features</b>	<b>Noncontributing Features</b> 1. Parking around inner circle and radial roads
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#### SOURCES:

- U.S. NATIONAL PARK SERVICE, NACC RESOURCE MANAGEMENT, LIVETREE DATABASE, 10/96.
- FIELD INVESTIGATIONS, 1996.
- HISTORIC PHOTO DOCUMENTATION, NATIONAL PARK SERVICE, MARS
- NATIONAL PARK SERVICE MAP FILES, SEE BIBLIOGRAPHY FOR MAP LISTING

#### LEGEND\*\*

- HISTORIC PRIMARY ROAD
- - - HISTORIC PRIMARY ROAD /  
NON-HISTORIC LIMITED ACCESS
- - - HISTORIC PRIMARY ROAD /  
NON-HISTORIC DIRECTION
- ..... NON-HISTORIC PRIMARY ROAD

\*\* Historic Circulation Patterns determined  
from implemented plan 1914-1933

### Map 17 VEHICULAR CIRCULATION LINCOLN MEMORIAL CIRCLE & RADIAL ROADS

CULTURAL LANDSCAPE REPORT  
LINCOLN MEMORIAL GROUNDS

PREPARED BY: M. JOSEPH DATE: OCTOBER 1996 FEB. 1997

**Pedestrian Circulation.** The 1916 plans developed for the memorial and the surrounding areas showed a range of treatment for the various types of proposed pedestrian and vehicular routes. The plans established a hierarchy of circulation for both use and materials, with the more formal in the immediate vicinity of the memorial. The main entry to the memorial, the approachway, was paved with granite and cobblestone, creating a stately surface (further detail is presented in the “Structures” discussion for the Lincoln Memorial circle and radial roads). Around the Lincoln Circle the material changed, a 15-foot-wide concrete sidewalk was placed along the inside circumference, while a concrete sidewalk, only 8 feet wide, was placed between the first and second circular band of elms, along the outside



*Figure 74 - Initial sidewalk installation, February 13, 1922. U.S. Navy photo. MRC 1-61.*

circumference. Lawn surrounded both walkways. Along the radial roads, the proposed concrete walks paralleled both sides of the four different streets. Each sidewalk was lined by a row of elms planted in an alternate design. Lawn also surrounded these walks. For the first phase of construction in the 1920, sidewalks were installed on both sides of 23<sup>rd</sup> Street NW and Bacon Drive, around the entire inner circle and on the eastern portion of the outer circle, between 23<sup>rd</sup> Street NW and SW. The final construction phase for the circle sidewalks did not occur until 1973, when an 8-foot-wide concrete walk was installed on the western circumference of the outer circle between 23<sup>rd</sup> Street NW and SW, replacing a temporary granite paver surface installed about 1950. Since 1973, portions of this walk have been replaced and repaved with bituminous asphalt. Circulation along French Drive has the least amount of design integrity of all the radial roads. Here, the proposed sidewalk alignment was never fully implemented. On one side of the road the walkway was placed between the alternating rows of elms, but on the opposite side (southwestern curb) the walk was installed in the 1960s along the curb edge.

Accessible routes to the memorial were installed in 1976 paralleling the approachway on the north and south sides. These routes were improved in 1995 and 1996, which provided a safer pathway to the base of the raised terrace. (A more detailed discussion about the accessible routes to the memorial can be found in the “Structures” section for the Lincoln Memorial circle and radial roads.)





**Figure 75 - Painted crosswalks from Lincoln Circle to the sidewalks along the radial roads and approaches, 1934. MRC 1-67.**

At Lincoln Circle, pedestrian crosswalks were painted at all intersections with the radial roads and the approachway (1932 photo documentation). However, from that time forward, pedestrians crossing from any point on the circle encountered hazardous traffic conditions, especially on the east side of the memorial. To provide a safe, unimpeded place for crossing, the National Park Service began limiting vehicular traffic to the eastern segment, between French and Bacon Drives, during the 1972 tourist season.

Although changes in width and materials have occurred, the pedestrian circulation still follows

the same patterns from the 1930s. Some of these material changes are reflected in the reinstallation of 1970s work at the entrance to the Korean War Veterans Memorial, in the earlier 1980s development of the Vietnam Veterans Memorial, and in Bicentennial projects. These



**Figure 76 - Eight-foot wide sidewalk along 23rd Street NW, January 3, 1997. LINC 16-13.**

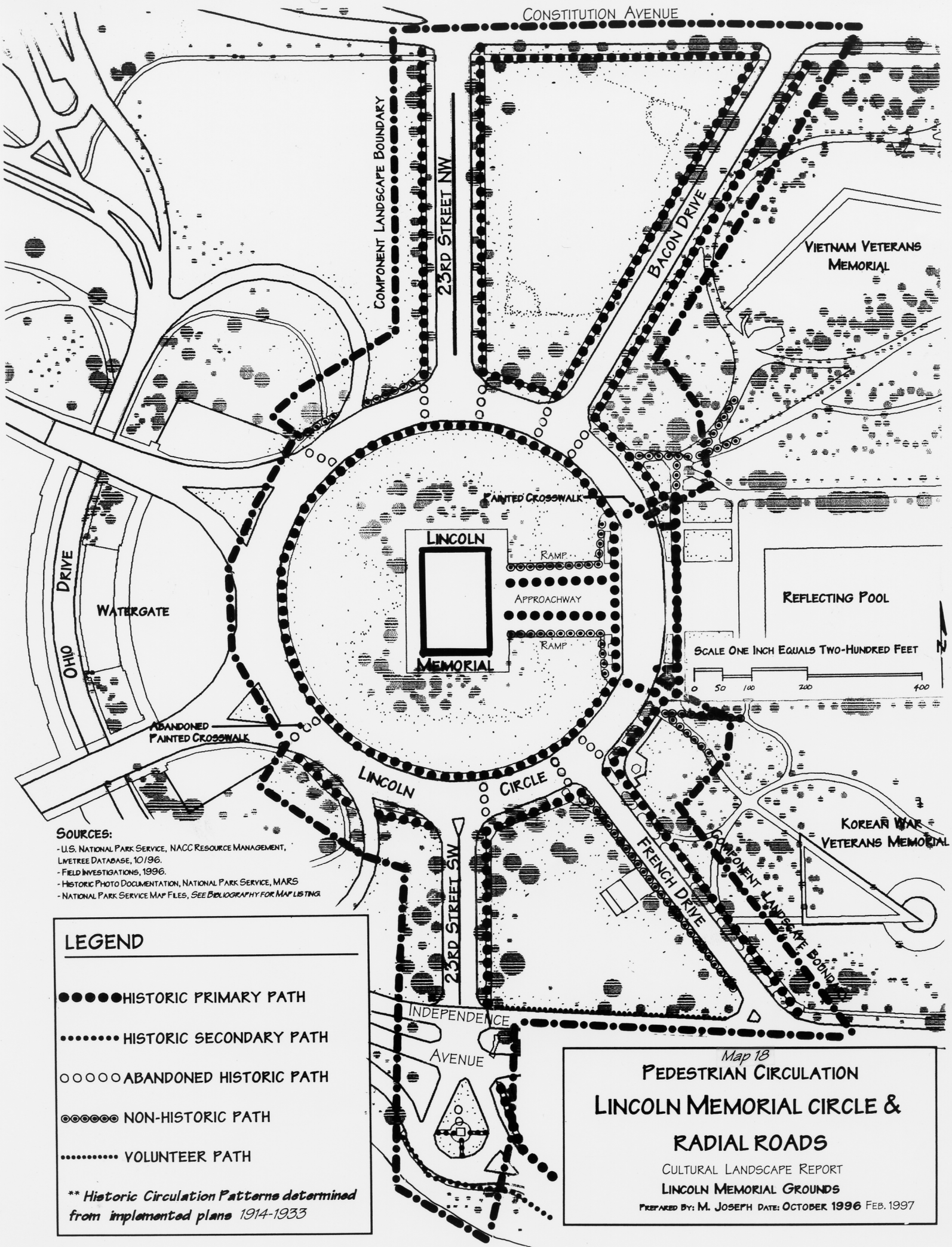


**Figure 77 - Nonhistoric layout of sidewalk along west side of French Drive, December 5, 1996. LINC 13-13.**

changes included extending sidewalks to the curb edge, the creation of individual tree planting beds with raised curb edges, and the addition of post and chain barriers to protect both the trees and the adjacent lawn. Many of the changes to the outer circular sidewalk and French Drive have been compounded with further additions brought on by the Korean War Veterans Memorial and by the perpetuation of nonhistoric site features. On the opposite side of the Reflecting Pool steps, at the Vietnam Veterans Memorial, the sidewalk width has been maintained, but it too is edged

with post and chain. See Map 18 *Lincoln Memorial circle and radial roads - Pedestrian Circulation* for graphic representation of contributing and noncontributing features.

<b>Contributing Features</b> <ol style="list-style-type: none"><li>1. Sidewalks along both sides of 23<sup>rd</sup> St. NW and Bacon Drive</li><li>2. Sidewalks on northeast side of French Drive and east side 23<sup>rd</sup> St. SW</li><li>3. Inner circle sidewalk</li><li>4. Outer circle sidewalk</li><li>5. Approachway</li><li>6. Sidewalk along south side of Constitution Avenue</li></ol>	<b>Noncontributing Features</b> <ol style="list-style-type: none"><li>1. Nonhistoric paths to Korean and Vietnam Memorials</li><li>2. Accessible routes north and south of approachway</li><li>3. Sidewalk on southwest side of French Drive</li><li>4. Volunteer path along Independence Avenue</li></ol>
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**SOURCES:**

- U.S. NATIONAL PARK SERVICE, NACC RESOURCE MANAGEMENT, LIVETREE DATABASE, 10/196.
- FIELD INVESTIGATIONS, 1996.
- HISTORIC PHOTO DOCUMENTATION, NATIONAL PARK SERVICE, MARS
- NATIONAL PARK SERVICE MAP FILES, SEE BIBLIOGRAPHY FOR MAP LISTING

**LEGEND**

- HISTORIC PRIMARY PATH
- ..... HISTORIC SECONDARY PATH
- ABANDONED HISTORIC PATH
- ◎◎◎◎◎ NON-HISTORIC PATH
- ..... VOLUNTEER PATH

**\*\* Historic Circulation Patterns determined from implemented plans 1914-1933**

Map 18  
**PEDESTRIAN CIRCULATION  
 LINCOLN MEMORIAL CIRCLE &  
 RADIAL ROADS**

CULTURAL LANDSCAPE REPORT  
 LINCOLN MEMORIAL GROUNDS

PREPARED BY: M. JOSEPH DATE: OCTOBER 1996 FEB. 1997

## Structures

Since the opening ceremonies in 1922, the Lincoln Memorial, dedicated to honor Abraham Lincoln, has been a symbol of the national capital and also a symbol of the reconciliation between North and South. It is the most important structural feature in the study area. Only a few structural changes have occurred since 1922, and these have been concentrated on the eastern face of the memorial. A series of steps and platforms, which make up the approachway, serve as the main entrance to the memorial. The approachway descends toward Lincoln Circle in a series of four platforms, each separated from the next by three granite steps. Each platform is a tripartite composition of a central area paved with granite, flanked by panels of smooth cobblestone, set in mortar bed, surrounded by granite block pavers. The bottom section consists of eight granite steps flanked on both sides by granite pedestals. The entire approachway system is supported by a concrete structure, pinned to bedrock.

Improvements were made to the approachway entrance in the 1970s, based on the Commission of Fine Arts approval. On the north and south sides, ramps, paved in exposed aggregate concrete, were installed to make the memorial more accessible for people unable to use the approachway steps. The ramps began at the outer granite pedestals at the inner circle sidewalk and continued behind the planting beds and turned 90 degrees to run parallel to the approachway along the outside edge of the yew hedges. They ended at the base of the raised terrace. The southeast entrance in the raised terrace wall led to an elevator and an exhibit space, as well as the restrooms. The northeast entrance was closed to the public.

Through the years the cobblestone panels have deteriorated, mostly due to freeze-thaw cycle. Park maintenance has responded by patching the deteriorated areas with a variety treatments. The unsightly appearance of this repair work for the cobblestone and safety concerns for visitors walking on the irregular surface, in addition to the structural problems, poor drainage, and lack of expansion joints, prompted the National Park Service to restore the entire approachway structure in 1995-1996. A few additions and alterations were made to the approachway area during this project. The cobblestone panels were removed and constructed in the same fashion as the original, with the exception that the stones were set to a greater depth in mortar to deter the



*Figure 78 - Approachway and Lincoln Memorial, January 3, 1997. LINC 16-20.*



*Figure 79 - Reconfigured accessible ramp to Lincoln Memorial, July 23, 1996. LINC 10-7.*



stones from dislodging. Also the ramps were redesigned to meet current accessibility standards according to the Americans with Disabilities Act (ADA) and provide a wider path for visitors. The new ramps have a more gentle slope (5%) and are 9 feet wide, 3 feet wider than the old ramps. As a result of the reduced slope of the ramps, the coping on the planting bed retaining walls needed to be raised 11 inches. Another course of granite and new granite coping (due to the deteriorated state of the original coping) were placed on top of the existing walls. The last change to the structure was the realignment of the ramps where they met the inner circle sidewalk. The previous ramps had a blind curve where the ramp and sidewalk came together. This situation was corrected to give visitors a clearer view when descending the ramp. Although the ramps are not historic, the National Park Service treated this area with the same respect for the historic fabric as they did for the main entrance steps by integrating the redesign of the ramp into the original approachway design. By using granite paving instead of exposed aggregate for the ramp surface, and by defining the edge of the ramps with granite coping, the ramps appear to be a part of the approachway.

The only other significant structure outside the Lincoln Circle is the Ericsson Memorial. This memorial is a granite statue designed to commemorate John Ericsson, the designer of the iron-clad warship *U.S.S. Monitor*, famous for its use during the Civil War. In 1926, a site was chosen for the Ericsson Memorial south of the Lincoln Memorial at the terminus of 23<sup>rd</sup> Street SW. The statue and granite platform were installed in 1927. The landscape around the base was completed in 1932 as part of the Arlington Memorial Bridge construction installation. Vehicular traffic circled around the statue where 23<sup>rd</sup> Street SW and the Ohio Drive met. The stones for the granite platform and steps leading up to the memorial have become dislodged overtime and are hazardous to visitors today.

Other structures outside of Lincoln Circle deal with visitor services. A concession stand was placed between the Reflecting Pool and French Drive in 1965. By 1992 two kiosks and a food concession trailer were located in this area. In 1993 the trailer was torn down and a new trailer



**Figure 80 - Refreshment stand along French Drive, December 5, 1996. LINC 13-18.**



**Figure 81 - Gift shop kiosk along French Drive, January 3, 1997. LINC 16-25.**

was placed on the west side of French Drive, because of the construction of Korean War Veterans Memorial in this section. A permanent location for the food and souvenir concession services has yet to be decided. In 1983 between the Reflecting Pool and Bacon Drive, the National Park Service placed an information kiosk to respond more effectively to questions about the newly constructed Vietnam Veterans Memorial. A similar type of information kiosk was constructed in 1996 for the Korean War Veterans Memorial at the southeast corner of French Drive and Lincoln Circle.

Several temporary structures associated with First Amendment rights are located along the northeast segment of the outer sidewalk of Lincoln Circle near the Reflecting Pool steps. The tents belong to groups selling t-shirts and other memorabilia in support of Vietnam War Veterans.

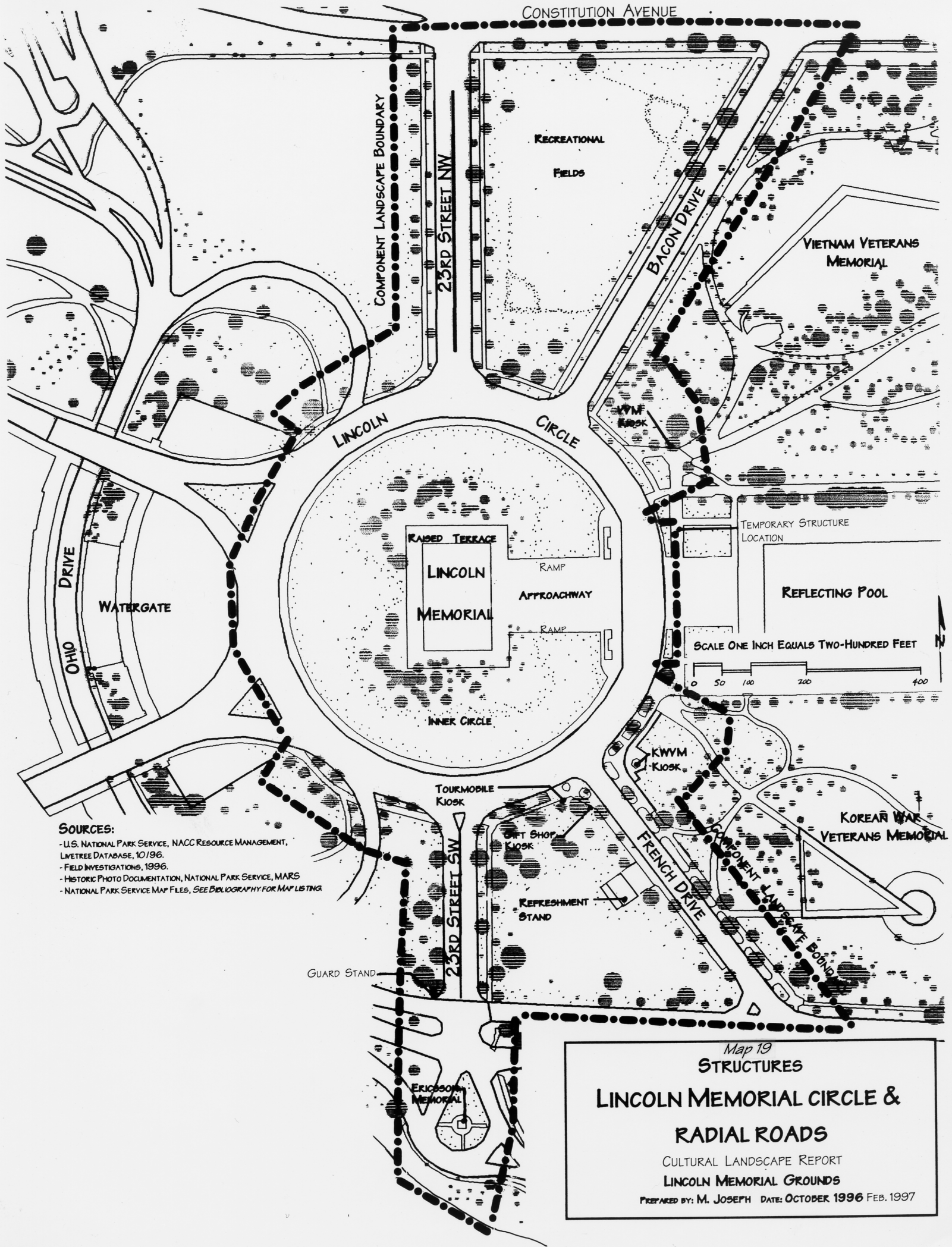


Another minor structure is a guard stand at the intersection of Independence Avenue, Ohio Drive, and 23<sup>rd</sup> Street SW. After the completion of Independence Avenue in the 1940s, the National Park Service placed this 5-foot by 5-foot structure to provide shelter for a traffic officer. The officers controlled the traffic light and setup barricades at this intersection to direct one-way traffic on the Rock Creek and Potomac Parkway during rush-hour. It is rarely used today. See Map 19 *Lincoln Memorial circle and radial roads - Structures* map for location of structural features.

*Figure 82 - Guard Stand at the intersection of Independence Avenue and 23rd Street SW, December 5, 1996. LINC 13-8.*

Contributing Features	Noncontributing Features
<ol style="list-style-type: none"> <li>1. Lincoln Memorial</li> <li>2. Approachway</li> <li>3. Ericsson Memorial</li> </ol>	<ol style="list-style-type: none"> <li>1. Approachway ramp</li> <li>2. Service and concession structures</li> <li>3. Temporary structures for use by vendors</li> <li>4. Guard stand</li> </ol>





#### SOURCES:

- U.S. NATIONAL PARK SERVICE, NACC RESOURCE MANAGEMENT, LIVETREE DATABASE, 10/196.
- FIELD INVESTIGATIONS, 1996.
- HISTORIC PHOTO DOCUMENTATION, NATIONAL PARK SERVICE, MARS
- NATIONAL PARK SERVICE MAP FILES, SEE BIOGEOGRAPHY FOR MAP LISTING

#### Map 19 STRUCTURES

### LINCOLN MEMORIAL CIRCLE & RADIAL ROADS

CULTURAL LANDSCAPE REPORT

LINCOLN MEMORIAL GROUNDS

PREPARED BY: M. JOSEPH DATE: OCTOBER 1996 FEB. 1997

## Small-Scale Features

**Benches.** The earliest photographs show benches around the outer sidewalk of the eastern segment of the circle, facing the memorial. From subsequent photographs, it does not appear that benches were initially placed along the sidewalks lining the radial roads. In the 1960s benches were placed in the areas around concession stands and bus dropoffs to provide seating for visitors. Benches were also concentrated along the outer circle sidewalk between Bacon Drive and the Reflecting Pool and between the Reflecting Pool and French Drive. When the Vietnam Veterans Memorial was completed in 1982, additional benches were placed along the newly created path linking this new memorial to the Lincoln. When the concession trailer was removed from its site between the Reflecting Pool and French Drive to the southwest side of French Drive, all the concession area benches were also removed and relocated with the structure. The type of bench used during the 1920s and 1930s is similar to the present bench, a cast-iron frame with a wooden slat seat and back. In response to the changes in visitor needs, benches are no longer evenly distributed over the wider Lincoln Memorial area as was done originally, but are concentrated near concession activities.



A granite bench is on both sides of the approachway, set back into the front planter beds. The bench is more a part of the formal structure of the Lincoln Memorial than as a separate site feature.

*Figure 83 - Cast iron frame benches were placed along the outer circle sidewalk, June 25, 1931. MRC 2-70.*

Contributing Features	Noncontributing Features
<ol style="list-style-type: none"> <li>1. Cast iron frame, wooden slat bench</li> <li>2. Granite bench</li> </ol>	<ol style="list-style-type: none"> <li>1. Location of cast iron frame benches</li> </ol>

**Trash Receptacles.** In the earliest photographs of the Lincoln Circle area, trash receptacles are not evident. However, photos do suggest that a wire-style receptacle was in use by the 1930s. In the 1960s a “tulip” style receptacle made of wooden slats, secured by a steel band with a metal can insert, were placed around the inner circle sidewalk at regular intervals and placed around the eastern segment of the outer circle sidewalk, also at regular intervals. As with the benches, trash receptacles were concentrated near the concession trailer. When the trailer was relocated,

the receptacles were also moved to French Drive. Generally trash receptacles and receptacles for recyclables are placed next to every bench that is along French Drive. Wire-type trash receptacles have been placed near ballfield backstops located in the grassy areas on the north between the radial roads. A variety of trash receptacles were found on the approachway during a study conducted in the early 1990s. The selection found there at that time included the "tulip," a pre-cast concrete trash receptacle and an upright metal type. These same three types are still used along the approachway. A tall white metal cylinder-type stands at the base of the approachway steps. A "tulip" has been positioned in both of the approachway planting beds on either side of the granite benches. And several pre-cast concrete trash receptacles are positioned at every elevation change for the approachway. None of the receptacles are compatible with the formal setting of the Lincoln Memorial.



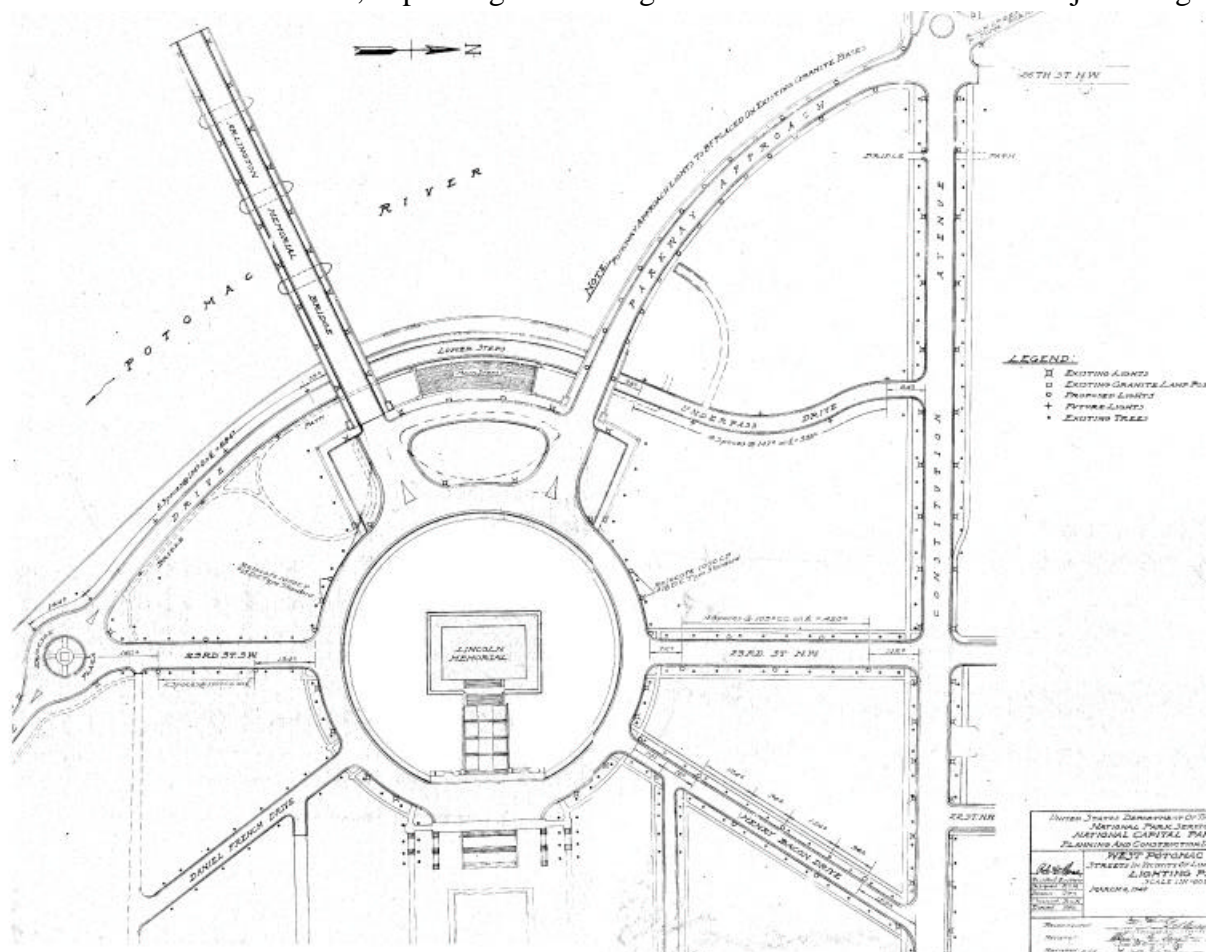
*Figure 84 - Two types of trash receptacles located in the front planter by a granite bench, July 23, 1996. LINC 10-5.*



*Figure 85 - Pre-cast concrete trash receptacles along approachway, December 15, 1996. LINC 13-24.*

Contributing Features	Noncontributing Features
1. Wire type trash receptacle	1. Tulip style trash receptacle
	2. Tulip style recyclable receptacle
	3. Pre-cast concrete trash receptacle
	4. Tall metal trash receptacle

**Lighting.** In Henry Bacon's original vision for the Lincoln Memorial, the structure and the surrounding grounds were to be lit exclusively by moonlight. Shortly thereafter, Bacon conceded to the installation of street lamps around the outer circumference of the Lincoln Circle and along the radial roads. The "Washington Globe" lights were selected. These were made up of an acorn, lamp style, and a cast-iron post. The post was painted a light gray color. Spaced approximately 75 feet apart on the traffic circle, the primary function of the streetlights was to provide illumination for the roads and walkways around the Lincoln Memorial, and not to light the interior of the memorial. Eighteen-foot high lampposts were placed around the circle to provide greater amount of illumination, since they were to be placed only along the outer circle. Subsequent improvements to the lighting occurred in 1927 when the CFA approved a plan to provide lighting in the statuary chamber. Another street lighting plan developed in 1940 refined the first plan. A few existing posts were relocated along the outer edge of the circle and a shorter version of the "Washington Globe" streetlight was installed along all the radial roads except French Drive. Shorter 16-foot posts were spaced alternately at even intervals, varying between 96 feet to 110 feet on-center, depending on the length of the radial road. The last major change



Map 20- Lighting Plan for West Potomac Park, 1940. NPS Map 76-321

was in 1969, when flood and spot lights were installed near the raised terrace wall to illuminate the exterior of the memorial structure. In 1972 the National Park Service proposed a lighting plan for French Drive, but it was never implemented. At some point after 1933, the lamppost were painted black, which differs drastically from the original light gray color.

Since 1969 no further additions have been made to the lighting for this area, but 16-foot Washington Globe lights were installed to illuminate the adjacent sites for the Vietnam and Korean Memorials. The soft light from these adjoining sites does change the nighttime character from what it was historically. The National Park Service is currently reassessing the existing installation for both the interior and exterior lighting of the Lincoln Memorial. Recent illumination studies have suggested improvements for lighting the statuary chamber, the interior murals, the colonnade, superstructure, and entrance approachway. Because most of the existing streetlights around the circle and radial roads still meet contemporary needs, the studies have not recommended changing the “Washington Globe” arrangement. With the exception of French Drive and where lampposts have not been maintained, the integrity of the lighting plan is still present, except for the darker color of the lamppost.

<b>Contributing Features</b>	<b>Noncontributing Feature</b>
<ol style="list-style-type: none"> <li>1. 18-foot Washington Globe lamppost, outer circle</li> <li>2. 16-foot Washington Globe lamppost, radial roads</li> </ol>	<ol style="list-style-type: none"> <li>1. Floodlights around Lincoln Memorial raised terrace wall (pole and base units)</li> <li>2. Washington Globe lamppost, Korean War Veterans Memorial</li> <li>3. Nonhistoric color of the “Washington Globe” lamppost</li> </ol>

**Paving Materials.** Originally all the sidewalks and curbs were concrete except for the approachway entrance, which were granite with cobblestone panels. However, the sidewalk around the inner circle had a scrubbed finish on the surface, while the outer sidewalk and the radial roads walks had a smooth finish. Unfortunately, due to subsequent repaving in the 1950s, 1970s and 1980s, no original sidewalk remains in the area. Recommendations for sidewalks and curbs in the *Streetscape Manual* specify a granite curb and exposed aggregate concrete as the preferred material for all sidewalks within the Lincoln Circle area. A hodge-podge of paving materials currently covers most of the pedestrian routes. These range from asphalt, granite block pavers, and exposed aggregate concrete to smooth concrete, all of which give the area an informal and undignified appearance. One other major change to the historic fabric was the installation of granite block pavers at the top of the Reflecting Pool steps in 1953, when the curb for the circular road was realigned.

Unlike the sidewalks surrounding the Lincoln Memorial, the approachway has retained its original fabric. An ongoing approachway rehabilitation project has addressed the deteriorated condition of the cobblestone panels. All of the cobblestones have been relaid and any loose granite stones have been reset. A subsequent addition to the historic approachway fabric are the granite accessible routes which flank the main walk on the north and south sides. Further detail



about the approachway rehabilitation project is found in the “Structures” section for the Lincoln Memorial circle and radial roads.

<b>Contributing Features</b>	<b>Noncontributing Features</b>
<ol style="list-style-type: none"> <li>1. Concrete sidewalks, grid scored</li> <li>2. Granite, cobblestone approachway</li> </ol>	<ol style="list-style-type: none"> <li>1. Exposed aggregate concrete sidewalks, for the outer, inner, and radial road sidewalks</li> <li>2. Granite block pavers at top of Reflecting Pool steps, along outer circle curb</li> <li>3. Asphalt sidewalk, portion of outer sidewalk</li> </ol>

**Drinking Fountains.** The 1916 design did not specify the use of drinking fountains, but according to photo-documentation, the Office of Public Buildings and Public Parks did installed drinking fountains along the outer circle by 1927. In 1996 two of the original concrete drinking fountains were documented to be adjacent to the outer sidewalk on the segment located between Bacon Drive and 23<sup>rd</sup> Street, NW and near the southwest corner of the intersection of Constitution Avenue and 23<sup>rd</sup> Street, NW. An accessible drinking fountain was installed at the lower end of each of the two ramps constructed along the memorial approachway in 1976. However, these were removed when the ramps and approachway were rehabilitated in 1995-1996. When reviewing the proposed modifications to the approachway, the CFA commented on the inappropriate design of the fountains at this particular location. Presently, the two old concrete fountains, a single accessible drinking fountain located southwest of the southern Reflecting Pool walk (1995), as well as accessible fountains near the adjacent playing fields on the south, and at the entrances to the Vietnam and Korean War Memorials all provide water to visitors. The newer fountains conform to current design standards for West Potomac Park and the Mall.



*Figure 86 - Concrete drinking fountain located between 23rd Street NW and Bacon Drive, January 3, 1997. LINC 16-16.*

<b>Contributing Features</b>	<b>Noncontributing Features</b>
<ol style="list-style-type: none"> <li>1. Concrete drinking fountains</li> </ol>	<ol style="list-style-type: none"> <li>1. Haws drinking fountain</li> </ol>



**Signs.** In the 1930s, the National Park Service continued the efforts of the Office of Public Buildings and Grounds (OPBG) and Office of Public Buildings and Public Parks (OPBPP) by providing a marker for the majority of memorial trees within the Lincoln Memorial area. A bronze shield, inscribed with the names of the dedicated individual or group, were embedded into a concrete base. There were three different installations proposed for the markers; flush to the ground; raised up above the ground on a slant; and a post above ground, straight. Over the years the markers have been damaged and removed or buried by grade increases near the base of the trees. Repair and replacement of the damaged markers stopped in the 1960s. Because of the lack of support for the maintenance of the memorial tree program in the Lincoln Memorial area, only two markers are left. Both of the markers are located between French Drive and 23<sup>rd</sup> Street SW. Since the creation of the first planting plan in the 1916 up until the implementation of the landscape design for the west side of the memorial in 1932, memorial trees and the markers have been an important site feature of the commemorative landscape.



*Figure 87 - Memorial planting shield located along the Lincoln Circle, April 1996. LINC 7-2.*



*Figure 88 - Bronze sign placed along approachway, April 16, 1952. MRC 1-44.*

In the 1950s and 1960s, a bronze sign placed in a central location on the approachway, indicated the visiting hours for the Lincoln Memorial. It appears that the low-profile sign was never permanently mounted to the paving.

Today contemporary styled signs help guide visitors to their destinations. At the top of the Reflecting Pool steps, a sign depicts an overall map of the mall. Other signs direct visitors to rest rooms at the memorial and “Tourmobile” bus stops. All other signs (regulatory) are directed toward vehicular traffic.

<b>Contributing Features</b> 1. Two memorial tree markers located between French Drive and 23 <sup>rd</sup> Street SW	<b>Noncontributing Features</b> 1. Overall map of the mall 2. Regulatory signs
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**Traffic and Pedestrian Barriers.** A variety of traffic barriers are used to control vehicular traffic around the circle. These include concrete planters, jersey barriers and flexible delineators. All the barriers add visual clutter and detract from the formal and geometric setting around the circle.

For pedestrian areas, four different types of barriers are used: post and chain; stake and chain; stake and rope; and snow fence. Park maintenance has installed these fences for a variety of reasons, but overwhelmingly for the control of visitor circulation. The most formal and most predominant is the post and chain. Most of the posts are installed in a metal sleeve set in the ground for easy removal. Although the second type, the stake and chain, is less widely used, it also prevents pedestrians from walking on grass and in planting beds. The other types, the stake and rope and/or snow fence, provide temporary protection of newly seeded areas and control circulation during special events.



*Figure 89 - Planter barriers on Lincoln Circle, December 5, 1996. LINC 13-20.*



*Figure 90 - Stake and chain barrier along French Drive, December 5, 1996. LINC 13-15.*

<b>Contributing Features</b>	<b>Noncontributing Features</b> 1. All types of traffic and pedestrian barriers
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**Bike Racks.** The increasing popularity of bicycles has prompted the National Park Service to place a few bike racks in the Lincoln Circle area. Two racks are located near the Vietnam Veterans Memorial information kiosk. Here, a separate concrete pad was provided as a base for

the racks. Two additional “ribbon style” bike racks were installed in 1996 at the entrance to the Korean War Veterans Memorial.

<b>Contributing Features</b>	<b>Noncontributing Features</b> 1. Bike racks
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**Telephones.** Telephones have always been associated with visitor services. Previously, public telephones were on the southeastern side of the outer circumference of the Lincoln Circle. Telephones are now found along French Drive near the concessions trailer.



*Figure 91 - Telephones located near refreshment stand along French Drive, July 23, 1996. LINC 10-11.*

<b>Contributing Features</b>	<b>Noncontributing Features</b> 1. Telephone bank on French Drive
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## Watergate area

### Vegetation

As part of the early development of park land along the Potomac River, Frederick Law Olmsted, Jr. recommended a selection of trees to line the newly completed shoreline drive. In keeping with the riparian character of the vegetation found along the shore, Olmsted suggested trees such as “black and yellow birches,” “white and laurel-leaved willow,” “Sycamore and American Elm,” and even pecan trees, planted in groupings, to supplement the existing willow trees.

Whether these trees were ever planted along the road, has yet to be determined. However, documentation indicates that American elms once lined the drive. Most of the elms were subsequently moved to new locations near the Lincoln Circle and the Watergate area during their development in the 1920s and 1930s. In the 1930s James Greenleaf served as



*Figure 92 - Aerial view of Watergate planting beds during installation of plants, July 29, 1932. U.S. Army Air Corps photo. MRC I-134.*



*Figure 93 - View of native planting on slope near the north plaza wing wall, July 19, 1933. MRC 2-80.*

the consulting landscape architect for the Arlington Memorial Bridge Commission. Greenleaf, in turn, directed Irving Payne, landscape architect from the Office of Public Buildings and Public Parks, in formulating a final planting plans for the Watergate steps area. Payne's plan included some of the same species planted within the Lincoln Circle, such as American holly, yew, and boxwood. These were planted in an informal arrangement in the beds formed by the

north and south plaza walls located on either side of the Watergate steps and the bridge and parkway abutments. To further frame the view toward the Potomac River and to supplement the broadleaf evergreens and coniferous shrubs, white pines (*Pinus strobus*),

bald cypress (*Taxodium distichum*), deodar cedar (*Cedrus deodara*), swiss stone pine (*Pinus cembra*), and mugo pine trees were added for height and mass to the far slopes adjacent to the north and south wing walls. Pink and white dogwoods (*Cornus florida*) were also added to provide interest during all seasons. Other native understory plantings, such as redbud (*Cercis canadensis*), birch (*Betula* sp.), and sassafras (*Sassafras albidum*), were proposed for both sides of the wing walls, but were probably never planted.



**Figure 94 - Riparian vegetation planted along portions of the Potomac River shoreline, December 5, 1996. LINC 13-11.**



**Figure 95 - Informal planting of memorial tree grove (naturalistic grove), January 3, 1997. LINC 16-10.**

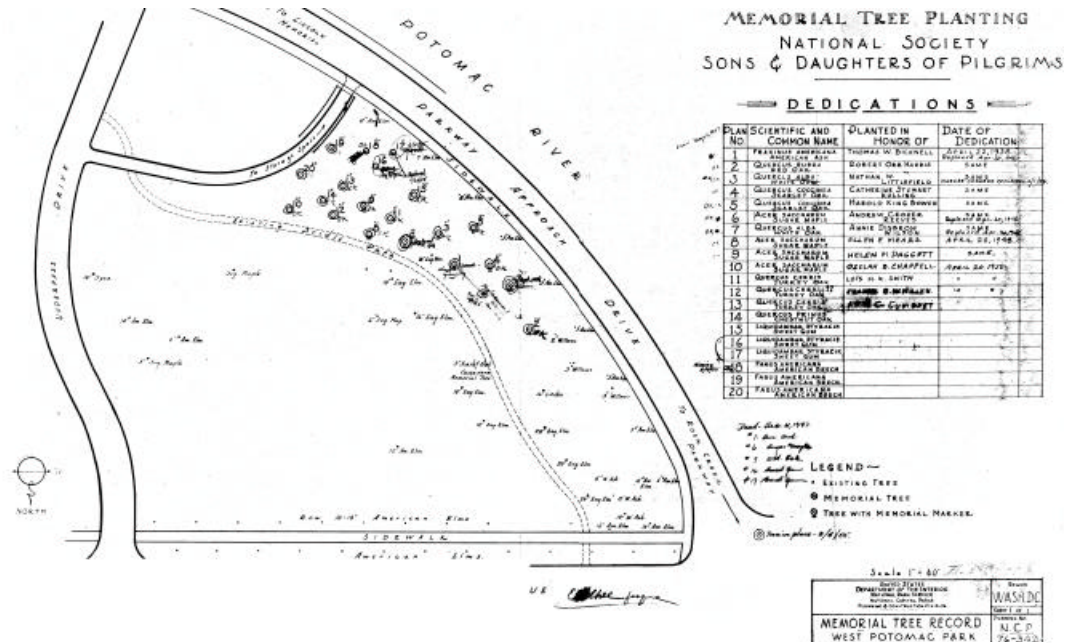
Other proposals specified a continuation of informal plantings of weeping willows (*Salix x elegantissima*) and understory vegetation along the river's edge. Because only a few of these trees were ever planted, the density of vegetation intended for this area never fully developed. As a result, open views to the river have persisted and are now preserved for the enjoyment of pedestrians, bicyclists, and

drivers using routes along the shoreline.

The greater the distance from the symmetrical design of the circle and the radial roads, the more informal the proposals for treatment became. The planting plans for the recreational areas west and northwest of the memorial were therefore informal in character. A grove of native, deciduous trees were planted here in the 1930s and 1940s as part of the memorial tree program. The exception to this was the row of American elms that lined the northeast side of Parkway Drive from the north Watergate wing wall to the terminus of Constitution Avenue. Again, as in the other informal areas, understory plantings were proposed but never planted during the initial stages of development. Subsequent additions

planted in the 1970s, 80s, and 90s have changed the naturalistic quality of the area. These include a yew hedge established to act as a screen and barrier near the volleyball courts, Kousa dogwoods (*Cornus kousa*) planted under a formal row of elms along Parkway Drive; and a large grove of Yoshino cherry trees (*Prunus x yedoensis*) installed to mark both sides of Ohio Drive, north of the Watergate steps, near the northwestern corner of West Potomac Park.





**Map 21 - Memorial tree plan for naturalistic grove, 1938 rev. 1955. NPS Map 801/80235.**

Along Constitution Avenue, a double row of American elms lined the road. At the western terminus, the formality continued. Two elms were planted in a small grassy area, and a circular planting bed surrounded by pavement marked the end of the avenue. Even after the realignment of Constitution Avenue in the 1960s, for the construction of the off ramps for the Roosevelt Bridge, a line of elms still follow the old alignment to the Potomac shoreline, where the terminus has remained unchanged since its construction in



**Figure 96 - Old Constitution Avenue terminus and remnant row of elms, January 3, 1997. LINC 16-5.**

the 1930s. The only possible change to the terminus are seasonal flowers that have been added to create interest to the formal circular bed. There is no documentation on how this circular area was proposed to be used after its installation.

Even with the changes in the landscape, much integrity from the original Arlington Memorial Bridge Commission planting plan remains. The transition from the more formally planted drives to the informal groupings of shrubs and trees on the grassy slopes is still intact. The tall picturesque white pines, bald cypress, and deodar cedars continue to frame the view from the top of the Watergate steps across the Potomac to the Virginia shoreline. Some flowering dogwoods still survive underneath these large trees, though these natives have been replaced in recent years with Kousa dogwood, which have a different, less open growth habit.





***Figure 97 - White pines, American elms and mugo pines frame view to Arlington Memorial Bridge, January 3, 1997. LINC 16-31.***

In one of the few areas where a formal geometric landscape treatment is not aligned to the road or street, the integrity of the plantings have been compromised by a lack of maintenance. This oversight has occurred just beyond the north wing wall, where only portions of the old double row of American elms remains. In other formal planting arrangements, the design integrity is still intact. Along Parkway Drive a single row of American elms still line the sidewalk. And although Constitution Avenue was realigned in the 1960s to accommodate access roads to the Theodore Roosevelt Bridge, a double row

of elms marks the old road alignment near the original western terminus.

The vegetation in the Watergate area is segmented into zones which define the spatial composition of the tree canopy and location of the open grassy areas. By breaking the landscape features into smaller units, there is a better sense as to the extent of the integrity of plantings for this component landscape, based on the original layout. See Map 22 *Watergate area - Vegetation* for graphic representation.

<p><b>Contributing Features</b></p> <ol style="list-style-type: none"> <li>1. Watergate area planting on both sides of each approach road (Arlington Memorial Bridge and Parkway Drive)</li> <li>2. Double row of American elms on south side of old alignment of Constitution Avenue</li> <li>3. Row of American elms on northeast side of Parkway Drive</li> <li>4. Remnant naturalistic grove, memorial trees, northeast of Parkway Drive</li> <li>5. Grassy areas Watergate plaza</li> <li>6. Remnant grassy panels west of 23<sup>rd</sup> Street</li> <li>7. Intact planting bed, Constitution Avenue terminus</li> <li>8. Riparian planting along Potomac River shoreline</li> <li>9. Grass strip along Potomac River shoreline</li> <li>10. Remnant double row of American elms, north and south of the Watergate wing walls</li> </ol>	<p><b>Noncontributing Features</b></p> <ol style="list-style-type: none"> <li>1. Understory planting along row of American elms Parkway Drive</li> <li>2. Cherry tree grouping</li> <li>3. Yew hedge beside volleyball courts</li> <li>4. Junipers planted in median by the Theodore Roosevelt Bridge on/off ramps</li> </ol>
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# SOURCES:

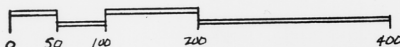
- U.S. NATIONAL PARK SERVICE, NACC RESOURCE MANAGEMENT, LIVETREE DATABASE, 10/96.
- FIELD INVESTIGATIONS, 1996.
- HISTORIC PHOTO DOCUMENTATION, NATIONAL PARK SERVICE, MARS
- NATIONAL PARK SERVICE MAP FILES, SEE BIBLIOGRAPHY FOR MAP LISTING

## LEGEND\*\*

- INTACT HISTORIC PLANTING
- INTACT HISTORIC GRASSY AREA
- INTACT HISTORIC CANOPY WITH NON-HISTORIC UNDERSTORY VEGETATION
- REMNANT HISTORIC PLANTING
- REMNANT HISTORIC GRASSY AREA
- VEGETATION ZONE

\*\* Intact TREE CANOPY and OPEN AREAS determined from implemented plans 1914-1934

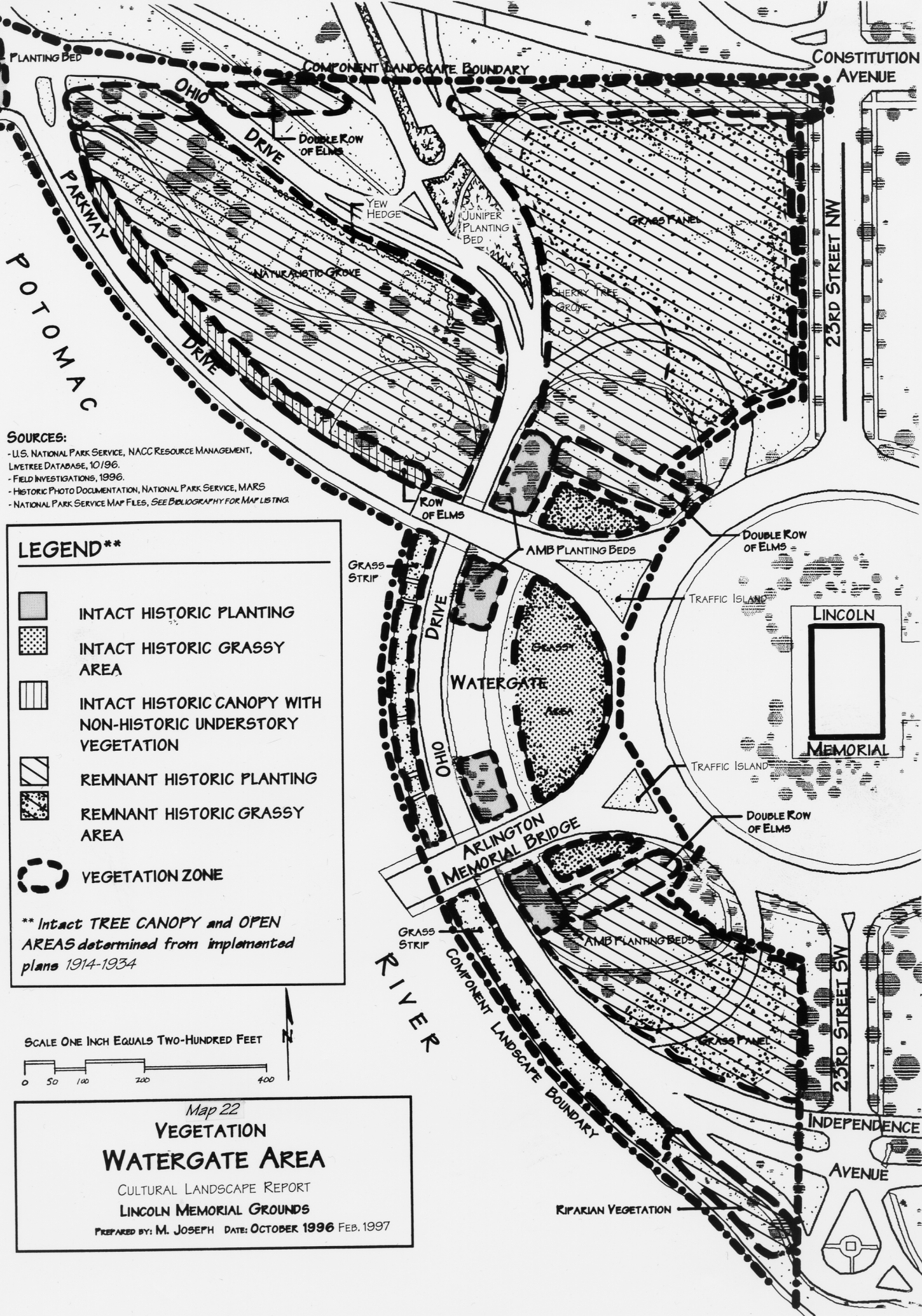
SCALE ONE INCH EQUALS TWO-HUNDRED FEET



## Map 22 VEGETATION WATERGATE AREA

CULTURAL LANDSCAPE REPORT  
LINCOLN MEMORIAL GROUNDS

PREPARED BY: M. JOSEPH DATE: OCTOBER 1996 FEB. 1997



## Circulation

**Vehicular Circulation.** The development of a shoreline drive, with bridle and foot paths, along the Potomac River shoreline in 1907, marks the beginning of road construction for this component landscape. When the development of more formal roads around the Lincoln Memorial occurred in the 1920s, the shoreline road was modified to accommodate these changes. Remnants of the old roadway are still visible along sections of present-day Ohio Drive, southeast of the Ericsson Memorial.



*Figure 98 - Aerial view of completed road system for the Watergate area, July 1937. U.S. Navy photo. MRC 1-64.*

In the fall of 1931, B Street North was widened, improved and renamed Constitution Avenue. The new route for Constitution Avenue lay slightly north of the old B Street and the historic 1791 shoreline. At the far western end of Constitution Avenue, at the river's edge and its intersection with Rock Creek and Potomac Parkway and 26th Street, NW, a terminus point was designed with a round planting bed and turnaround area for automobiles.

By 1932, the area directly west of the Lincoln Memorial had been transformed by an expansion of the shoreline behind a new seawall and by the construction of the abutment for Arlington Memorial Bridge, the Watergate steps and plaza and Parkway Drive or the approach road for Rock Creek and Potomac Parkway. The formal design of the approaches to the Lincoln Memorial from Arlington Memorial Bridge and Rock Creek and Potomac Parkway both emphasized and framed the open axis across the river to Arlington Cemetery and the Arlington House. Two small traffic islands were located where the approaches met the circular drive. At the Watergate plaza area, a road connected the two approaches. This road primarily functioned as a parking area for concession vehicles during the Watergate concerts, and otherwise limited parking

occurred here. The only other available parking locations in the Watergate area were along the northeast side of Parkway Drive. To manage the originally unanticipated automobile traffic at Lincoln Circle from the bridge entrance and the parkway approach, the riverside drive, known as Ohio Drive, was routed directly in front of the Watergate steps and through underpasses constructed under the Arlington Memorial Bridge and the parkway. The northern end of the drive (then referred to as Underpass Drive) was then rerouted through the golf course area in the northwestern part of West Potomac Park, where it intersected with Constitution Avenue just east of the terminus point. During the same time period, a service road for park vehicles, which was designed to provide access to a storage area located under Parkway Drive, was constructed between Constitution Avenue and the underpass road.

Significant road improvements occurred in the 1940s when the D.C. Department of Highways and the Public Works Administration constructed the western extension of Independence Avenue through West Potomac Park. The new extension met the drive (Ohio Drive) north of the Ericsson Memorial and followed an easterly route on an alignment of an older east/west park road. At this time, a cloverleaf configuration was also constructed

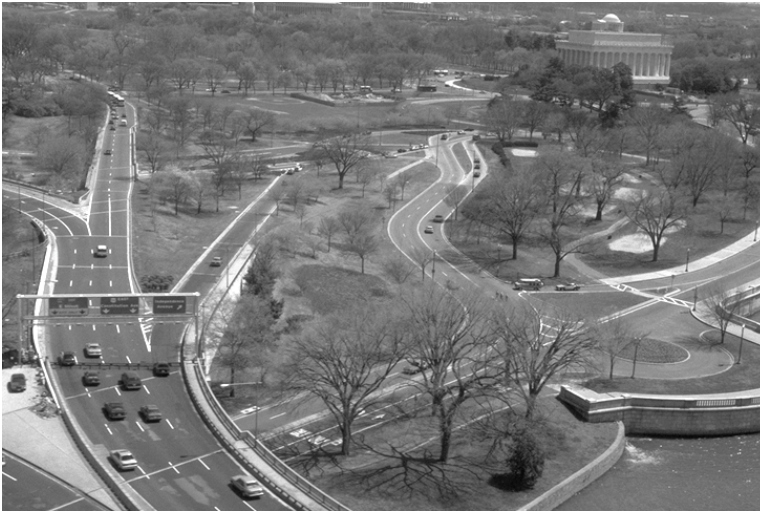


**Figure 99 – Aerial of Independence Avenue and cloverleaf pattern before construction of Theodore Roosevelt Bridge, January 27, 1960. MRC I-108.**

north and south of the Watergate steps plaza to accommodate the increase in traffic and to provide safe on/off ramps from Ohio Drive to Lincoln Circle and the approaches. The traffic islands at the circle were enlarged at this time to control traffic from the approaches to Lincoln Circle. The previously granite block pavers filling in the islands were removed in favor of grass.

The last major change in vehicular circulation occurred in 1964 with the completed construction of a segment of a proposed inner loop freeway and the Theodore Roosevelt Bridge across the Potomac River. The impact of a new network of roads on Constitution Avenue, west of 23<sup>rd</sup> Street, was significant. The on/off ramps required for the bridge and freeway made the previous configuration of Constitution Avenue impossible to maintain. The Constitution Avenue approach to the formal terminus was thus eliminated in favor of curving ramps and new access roads. In 1984 the road at the top of the Watergate steps was removed and sodded over, but the granite curb remained along the sidewalks edge.





**Figure 100 - Aerial view of Roosevelt Bridge and its connection to Constitution Avenue and Ohio Drive, April 1996. MRC 3-27.**



**Figure 101 - Ohio Drive (Riverside Drive) and underpass for Arlington Memorial Bridge, June 1996. LINC 9-11.**

Again the traffic islands were modified and enlarged a second time, and remained an open grassy area.

Although much of the symmetrical and formal road plan outlined first in the McMillan Commission Plan of 1902 and incorporated later into the design for the Arlington Memorial Bridge, Rock Creek and Potomac Parkway, and the Watergate remains intact, the changes brought by the extension of Independence Avenue and the construction of the Roosevelt Bridge and freeway segment, did alter the historic landscape. Most of these changes have occurred north of the Watergate area, where in the 1940s a cloverleaf ramp was added and in the 1960s Constitution Avenue and Ohio Drive were reconfigured. Changes in vehicular circulation south of the Watergate plaza have had a less dramatic impact

on the landscape around Lincoln Circle. Here, only a cloverleaf ramp was constructed. See Map 23 *Watergate area - Vehicular Circulation* for graphic representation of contributing and non-contributing features.





Contributing Features	Noncontributing Features
<ol style="list-style-type: none"> <li>1. Arlington Memorial Bridge</li> <li>2. Parkway Drive</li> <li>3. Ohio Drive</li> <li>4. Service road to storage area</li> <li>5. Remnant Constitution Avenue terminus</li> </ol>	<ol style="list-style-type: none"> <li>1. Independence Avenue extension</li> <li>2. On and off ramps at Ohio Drive (cloverleaf pattern)</li> <li>3. Theodore Roosevelt Bridge on and off ramps</li> <li>4. Size of traffic islands on Lincoln Circle</li> </ol>



# SOURCES:

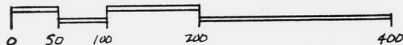
- U.S. NATIONAL PARK SERVICE, NACC RESOURCE MANAGEMENT, LIVETREE DATABASE, 10/96.
- FIELD INVESTIGATIONS, 1996.
- HISTORIC PHOTO DOCUMENTATION, NATIONAL PARK SERVICE, MARS
- NATIONAL PARK SERVICE MAP FILES, SEE BIBLIOGRAPHY FOR MAP LISTING

## LEGEND\*\*

-  HISTORIC PRIMARY ROAD
-  HISTORIC SECONDARY ROAD / HISTORIC LIMITED ACCESS
-  LOST HISTORIC ROAD / HISTORIC LIMITED ACCESS
-  NON-HISTORIC PRIMARY ROAD

*\*\* Historic Circulation Patterns determined from implemented plans 1914-1934*

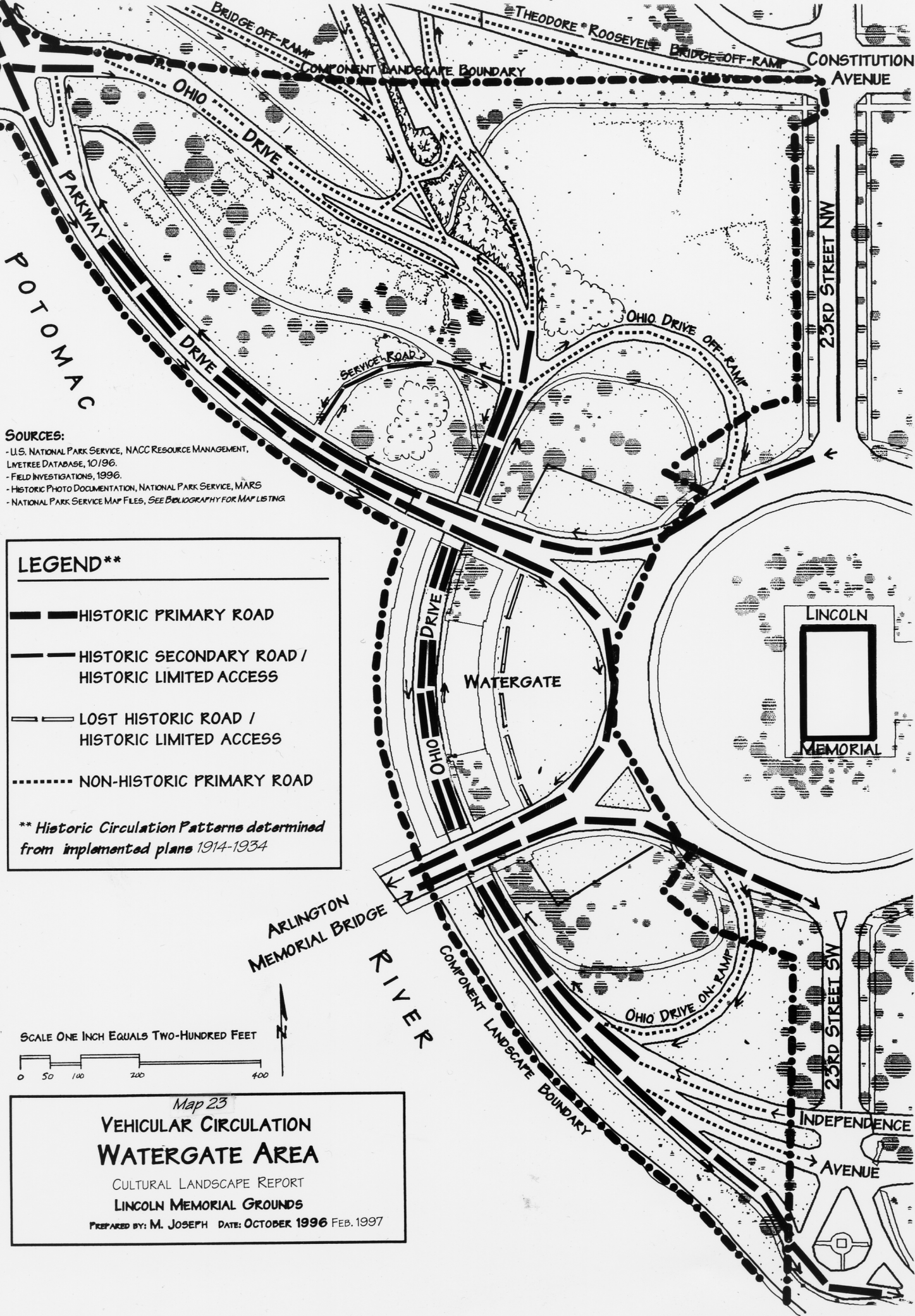
SCALE ONE INCH EQUALS TWO-HUNDRED FEET



## Map 23 VEHICULAR CIRCULATION WATERGATE AREA

CULTURAL LANDSCAPE REPORT  
LINCOLN MEMORIAL GROUNDS

PREPARED BY: M. JOSEPH DATE: OCTOBER 1996 FEB. 1997



**Pedestrian Circulation.** As a part of the development of a shoreline drive after the turn of the century, bridle trails and pedestrian paths, designed to parallel the road, were incorporated into the overall plan for the roadway. The existing system of paths was modified in the 1930s when the layout of the roads was changed as part of the construction of Arlington Memorial Bridge and Rock Creek and Potomac Parkway. Plans called for a bridle trail to wind through the golf course area in the northwestern corner of West Potomac Park near the parkway, to cross the underpass drive on the north side of the bridge plaza, to pass directly in front of the Watergate steps, to continue southeast along the underpass drive along the slope, or to curve up around the slope of the south wing wall of the bridge plaza toward a second route, which followed the inbound lane on Arlington Memorial Bridge. Along its route, the trail surface was mostly a soil base. However, in the underpasses and in front of the Watergate steps, the trail was paved in square granite blocks.



*Figure 102 - Completed sidewalk and bridle trail by south plaza wing wall, June 9, 1933. MRC 1-75.*

In contrast to the curving bridle trail on the south side of the bridge approach, two pairs of concrete sidewalks connected to the straight walks on both sides of the bridge and the parkway approach but did so by following the right angles of the north and south wing and plaza walls. The continuation of the bridge and parkway balustrades, with built-in benches, on top of the wing and plaza walls added a high degree of formality to this pedestrian area and gave visual definition to the outer edge of the plaza. The far walks, with their 90-degree turn at the corner of the wing walls,



*Figure 103 - Walkway on either side of Ohio Drive at base of Watergate steps, April 1996. LINC 6-15.*



**Figure 104 - Sidewalk along Parkway Drive, April 1996. LINC 6-18.**

ended abruptly at Lincoln Circle.

Pedestrians were prompted to cross the circle at a painted crosswalk to the inner circle sidewalk. Around 1960, granite block pavers defined the outer circle sidewalk. This sidewalk was finally paved with concrete in 1973. The inside walks, in turn, followed the gentle arc of the plaza to come together at the top of the Watergate steps. The walks on the parkway approach connected to less formal pedestrian paths along the parkway itself. Proposals for the continuation of informal paths along the river's edge,

south of the bridge, never fully developed. Some years later, an asphalt walkway following the Potomac shoreline did extend southeast beyond the Watergate area. It connected with the concrete sidewalk constructed along the river's edge under the bridge abutment by the lower set of Watergate steps. This path also extended northwest, on the north side of the lower steps, under the parkway approach, where it joined with the previously mentioned bridle trail connection along Rock Creek and Potomac Parkway.



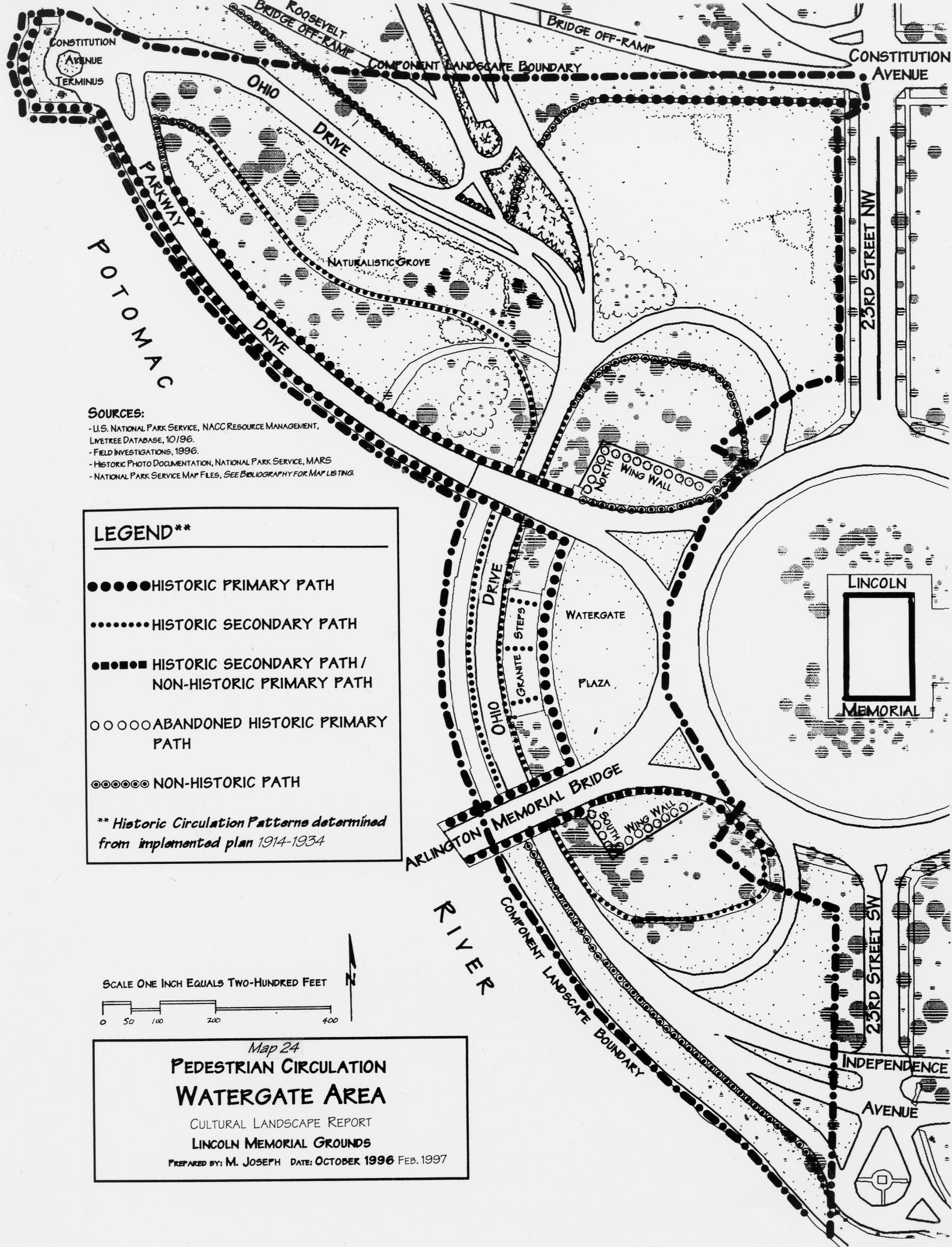
**Figure 105 - South plaza wing wall with new concrete path in same alignment as original bridle path, December 5, 1996. LINC 13-1.**

To accommodate the changes in recreational use, the bridle paths were modified to serve as both a pedestrian path and as a bicycle trail. An asphalt pathway was installed along the slope in the area north of the parkway approach and connected to the system of walks around the outer circle. In response to patterns of use, the concrete sidewalks located along both the north and south wing walls were removed, and new concrete walks were constructed along the curving curb edge of the bridge and parkway approaches, where a worn dirt path had been created. Even though the use of some paths have

changed, the majority of them still follow the same circulation patterns established in the 1930s. The pair of concrete sidewalks, removed from the top of the wing walls, are the major design elements no longer extant. See Map 24 *Watergate area - Pedestrian Circulation* for graphic representation of contributing and noncontributing features.

<b>Contributing Features</b> <ol style="list-style-type: none"><li>1. Sidewalks on both sides of Arlington Memorial Bridge, and Parkway Drive</li><li>2. Sidewalk at top of Watergate steps</li><li>3. Path on both sides of Ohio Drive at base of Watergate steps</li><li>4. Path through naturalistic planting (old bridle path)</li><li>5. Portion of sidewalk along south side of Constitution Avenue</li><li>6. Path along southwest curb from Arlington Memorial Bridge to Lincoln Circle (old bridle path)</li><li>7. Path from southern plaza wing wall down to Ohio Drive (old bridle path)</li></ol>	<b>Noncontributing Features</b> <ol style="list-style-type: none"><li>1. Path from northern plaza wing wall down to Ohio Drive</li><li>2. Watergate plaza sidewalk along northwest curb from Parkway Drive to Lincoln Circle</li><li>3. Path along shoreline from Arlington Memorial Bridge underpass, south</li><li>4. Path to Theodore Roosevelt Bridge</li></ol>
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**SOURCES:**

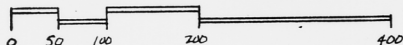
- U.S. NATIONAL PARK SERVICE, NACC RESOURCE MANAGEMENT, LIVETREE DATABASE, 10/196.
- FIELD INVESTIGATIONS, 1996.
- HISTORIC PHOTO DOCUMENTATION, NATIONAL PARK SERVICE, MARS
- NATIONAL PARK SERVICE MAP FILES, SEE BIOGEOGRAPHY FOR MAP LISTING

**LEGEND\*\***

- HISTORIC PRIMARY PATH
- ..... HISTORIC SECONDARY PATH
- HISTORIC SECONDARY PATH /  
NON-HISTORIC PRIMARY PATH
- ○ ○ ○ ○ ABANDONED HISTORIC PRIMARY  
PATH
- ◎ ◎ ◎ ◎ ◎ NON-HISTORIC PATH

*\*\* Historic Circulation Patterns determined  
from implemented plan 1914-1934*

SCALE ONE INCH EQUALS TWO-HUNDRED FEET

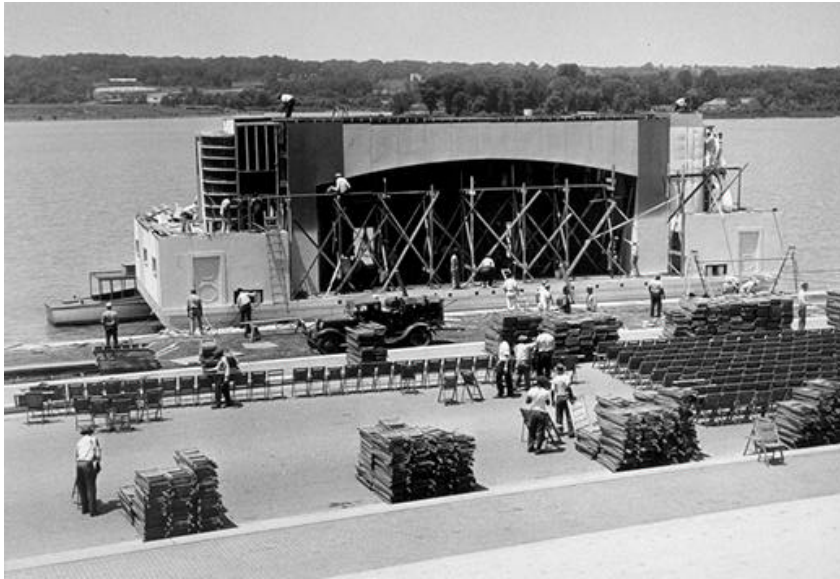


*Map 24*  
**PEDESTRIAN CIRCULATION  
WATERGATE AREA**

CULTURAL LANDSCAPE REPORT  
LINCOLN MEMORIAL GROUNDS

PREPARED BY: M. JOSEPH DATE: OCTOBER 1996 FEB. 1997

## Structures



*Figure 106 - Watergate concert barge located at the base of the Watergate steps, July 19, 1939. MRC 1-1.*

One of the most significant pieces of the McMillan Commission plan, the ceremonial Watergate, was realized with the completion of the Arlington Memorial Bridge in 1932. Although the implemented plan remained faithful to the concept, the reason for it and the changes made to the original design to accommodate

vehicular traffic around it, underscore the increasingly large effect automobiles had on the landscape design of West Potomac Park. For the purposes of this report, the Watergate structure includes the steps, the bridge abutment (Arlington Memorial Bridge) and parkway connections (Rock Creek and Potomac Parkway), the plaza walls and the wing walls. The steps, both the main and the lower leading to the river, and the walls are built of granite, as are the curbs edging the plaza sidewalk and lawn. The plaza sidewalk, however, is constructed of concrete, while the lower sidewalk facing Ohio Drive is of granite blocks. A second lower sidewalk at the river's edge, was originally constructed of granite blocks but was subsequently changed to concrete. Along the top of the wing and plaza walls, a balustrade of granite lines the perimeter of the plaza area. As mentioned previously two pairs of benches were set into the design of the balustrade on the north



*Figure 107 - Valor and Sacrifice statues flank entrance to Arlington Memorial Bridge, February 1997. LINC 18-5.*

and south wing walls. At the entry from the plaza to the bridge and to the parkway approach, two pairs of granite pedestals were incorporated into the structure. These were intended to be the bases for four monumental sculptures. The pedestals stood empty, the sculptures awaiting funding, until 1951, when the installation and dedication finally took place. The large figural works of art were allegorical representations of Valor, Sacrifice, Music and Harvest, and Aspiration and Literature.



Since the Watergate's original purpose as a ceremonial entry to the nation's capital never developed, other uses were sought for the area. An open-air summer series of concerts were proposed for the steps. An orchestra shell was constructed on a barge, secured to pilings, at the water's edge in 1937 and again in 1938. A third orchestra shell was



constructed in 1947-48. Musical performances were held during the summer months until the 1970s, when traffic concerns and air traffic noise from National Airport became detrimental to the public's enjoyment of the events. Since this time the Watergate steps have been used very little, mostly standing as an architectural remnant from the McMillan plan.

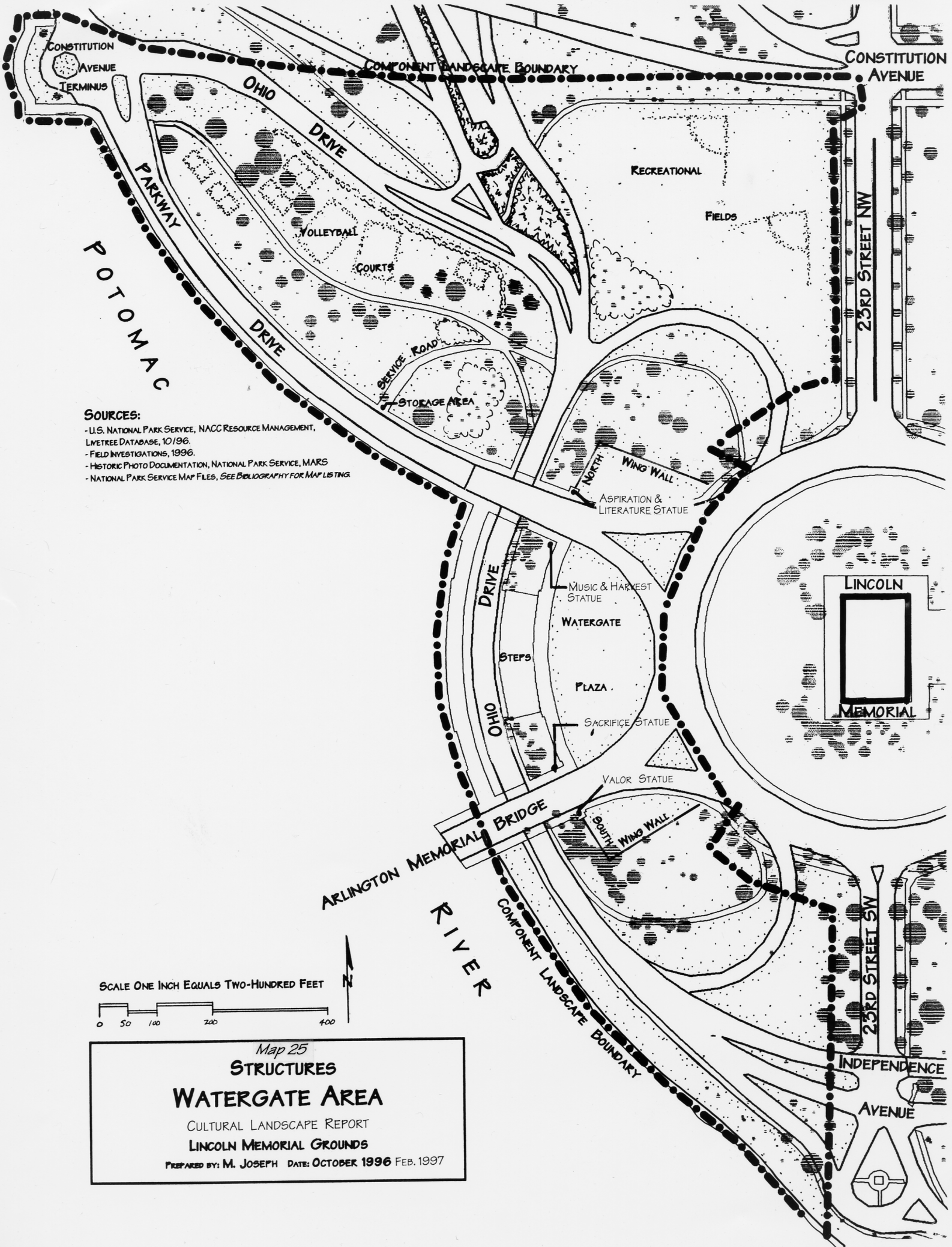
**Figure 108 - Ceremonial Watergate steps and Arlington Memorial Bridge, January 3, 1997.**  
**LINC 16-36.**

Other structural uses were sought from the Watergate area. The Parkway Drive abutment served as a storage area and as the location for a public rest room.

Limited access to the storage area was provided in the 1930s for the park and is still used presently. The doorways to the restrooms were under the north side of the parkway approach abutment. They opened onto Ohio Drive. These rest rooms were only open during performances and since the concerts ended, they are no longer in service.

Both historic design intent and original structural integrity remain in the Watergate area. The only significant changes have been the elimination of the plaza access road, near the top of the main steps and the use of a different, non-historic color and texture on the concrete surface of the bridge sidewalks and the plaza sidewalks. See Map 25 *Watergate area - Structures* for location of structural features.

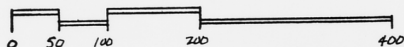
Contributing Features	Noncontributing Features
<ol style="list-style-type: none"> <li>1. Arlington Memorial Bridge abutment</li> <li>2. Watergate steps</li> <li>3. Parkway Drive abutment</li> <li>4. Statuary on approachway pedestals (Valor, Sacrifice, Music and Harvest, and Aspiration and Literature)</li> <li>5. Watergate plaza wing walls</li> </ol>	



**SOURCES:**

- U.S. NATIONAL PARK SERVICE, NACC RESOURCE MANAGEMENT, LIVETREE DATABASE, 10/196.
- FIELD INVESTIGATIONS, 1996.
- HISTORIC PHOTO DOCUMENTATION, NATIONAL PARK SERVICE, MARS
- NATIONAL PARK SERVICE MAP FILES, SEE BIBLIOGRAPHY FOR MAP LISTING

SCALE ONE INCH EQUALS TWO-HUNDRED FEET



Map 25

**STRUCTURES**  
**WATERGATE AREA**

CULTURAL LANDSCAPE REPORT  
LINCOLN MEMORIAL GROUNDS

PREPARED BY: M. JOSEPH DATE: OCTOBER 1996 FEB. 1997

## Small-Scale Features

**Benches.** Historically no provisions were made for free-standing park benches in the Watergate area. Even today, there are no free-standing benches provided for visitors, instead visitors can sit on the Watergate steps or use a more permanent seats where granite benches were built into the plaza wing walls and along the bridge approach walls for Parkway Drive and Arlington Memorial Bridge. Because the location of the granite benches along busy roads is unappealing to visitors, the benches are rarely used.



**Figure 109 - Granite bench built into river wall along Parkway Drive, January 3, 1997. LINC 16-3.**



**Figure 110 - Granite benches built into Watergate plaza wing walls, April 1996. LINC 6-8.**

Contributing Features	Noncontributing Features
<ol style="list-style-type: none"> <li>1. Watergate granite benches, plaza wing walls and bridge approaches</li> <li>2. Watergate steps</li> </ol>	

**Trash Receptacles.** There are only a few trash receptacles placed throughout the Watergate area. The majority are located near the volleyball courts, where a high degree of recreational activity occurs during the summer months. Consistent with *Streetscape Manual* recommendations, the standard “tulip” receptacles are used in this area. In years past, numbers of receptacles were placed around the Watergate steps during the concert season and for special events.

Contributing Features	Noncontributing Features
	<ol style="list-style-type: none"> <li>1. “Tulip” style trash receptacle</li> </ol>



**Figure 111 - Twin-twenty lamppost at old terminus for Constitution Avenue, March 1996. LINC 6-20.**

**Lighting.** As with the Lincoln Circle and the radial roads, streetlights were limited to specific locations along routes for vehicles. Designs for Arlington Memorial Bridge and Parkway Drive incorporated the “Washington Globe” lamp and 18-foot post. On the bridge the lights were spaced evenly in opposite positions, while in all other locations they were set in an alternate arrangement. Along Parkway Drive the lampposts were originally planned to be on granite bases. Later the bases were removed and the posts were set on grade according to the established pattern of installation elsewhere in the Lincoln Memorial area. The “Washington Globe” lamp and post also illuminated the Watergate plaza area, at the top of the steps. Along Constitution Avenue at the northern boundary of the park, “Twin-twenty” lamps and posts were installed.

This type of streetlight had been designated for all major city streets and avenues along the Mall and around the memorials. At the time of Constitution Avenue’s realignment for the freeway and bridge in the 1960s, highway planners retained only five “twin-twenties” near the western terminus point. “Cobra-style” highway lights, a standard light used for major roadway development at the time, were installed along the ramps and access roads associated with the design of the Theodore Roosevelt Bridge and the inner loop freeway.

The majority of the street lights installed in the 1930s and 1940s have remained in their original positions. A few lights were relocated within the Watergate plaza area, when it was reconfigured to accommodate the access ramps from Ohio Drive added during the construction of Independence Avenue in the 1940s. At

this time triangular traffic islands were enlarged, the large grassy island in the center of the plaza was reduced, and the radius of the curbs along the plaza was altered to improve the flow of automobile traffic entering and exiting Lincoln Circle from the bridge and the parkway approaches. Other revisions occurred in the 1970s when two “Washington Globe” lights were added at the top of the Watergate steps and two more were installed around the grassy island.



**Figure 112 - Washington Globe lamppost at the Watergate plaza, March 1996. LINC 6-14.**



**Figure 113 - Cobra style lamppost along Ohio Drive, January 3, 1997. LINC 16-7.**



<b>Contributing Features</b>	<b>Noncontributing Features</b>
<ol style="list-style-type: none"> <li>1. 18-foot Washington Globe lamppost, Arlington Memorial Bridge, Parkway Drive, Ohio Drive</li> <li>2. Twin-twenty lamppost, Constitution Avenue</li> </ol>	<ol style="list-style-type: none"> <li>1. Cobra lamppost, Theodore Roosevelt Bridge on/off ramps</li> <li>2. Nonhistoric location of 18-foot Washington Globe lamppost, Watergate plaza</li> </ol>

**Paving Materials.** Originally, all the sidewalks were concrete and the bridle paths were soil base, with exception of the granite block pavers at the base of the Watergate steps. After 1950 when horse riding was deemed too dangerous in West Potomac Park, some of the bridle paths were paved with asphalt to create a stable base for pedestrian and bicycle traffic. No original concrete sidewalks remain in the area. Recommendations for



*Figure 114 - Granite Watergate steps, June 1996. LINC 9-12.*



*Figure 115 - Granite block pavers at base of Watergate steps, c. 1939. MRC 1-5.*

sidewalks in the *Streetscape Manual* specify a granite curb and exposed aggregate concrete as the preferred material for all sidewalks within the Watergate area. These recommendations have been carried out. The color and texture of the new paving contrasts unfavorably with the granite material used for the wing walls, steps and bridge abutments. Only a few historic paving surfaces remain in use in the Watergate area, these include the granite block pavers at the base of the steps, as well as the granite steps themselves.

<b>Contributing Features</b>	<b>Noncontributing Features</b>
<ol style="list-style-type: none"> <li>1. Granite block pavers, base of steps</li> <li>2. Granite Watergate steps</li> </ol>	<ol style="list-style-type: none"> <li>1. Exposed aggregate concrete sidewalks</li> <li>2. Informal asphalt paths</li> </ol>

**Drinking Fountains.** During the development of the Watergate area in the 1930s, the installation of fountains was not included in the landscape proposal. Today, only one



drinking fountain, a Haws accessible style, is located within the Watergate area. The fountain is adjacent to the volleyball courts and the paved trail that bisects the grassy area surrounding the courts.

<b>Contributing Features</b>	<b>Noncontributing Features</b> 1. Haws Drinking Fountain
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**Signs.** There are a limited number of signs within the Watergate area. Today, and as the case historically, the majority of the signs are directed toward vehicular usage (regulatory signs). The remaining signs direct pedestrians and bicyclist to adjacent sites within West Potomac Park. A few pedestrian/bicyclist oriented signs advise visitors against crossing Lincoln Circle at dangerous points. The park service has also installed a small bulletin board next the volleyball courts to post information, rules and regulations.

Some of the memorial trees east of the Parkway Drive were tagged with memorial tree markers. Based on the 1996 field investigation, none of these markers were extant. For further information regarding the memorial tree markers, see *Lincoln Memorial circle and radial roads - Small-Scale Features – Signs* section.

<b>Contributing Features</b>	<b>Noncontributing Features</b> 1. Regulatory signs 2. Bulletin board
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**Traffic and Pedestrian Barriers.** The park installed a post and chain barrier along the outer curb of the west side of Lincoln Circle to deter pedestrians and bicyclist from crossing the road at unsafe points from the bridge plaza area. Historically, there were painted crosswalks on both sides of the Watergate plaza for pedestrians to cross this section of the circular road, but because of the increase speed and volume of vehicles, pedestrians are now directed along the outer circle sidewalk.

Barriers are utilized on some of the vehicular routes as well. Wooden traffic barriers and cones are used during rush hour to control one-way traffic on Rock Creek and Potomac Parkway. This practice has been in effect since 1937. In addition to the daily “temporary” barriers, there were rustic guardrails placed along Ohio Drive after its completion in 1933.



*Figure 116 - Rustic timber guardrail along Ohio Drive, c. 1935. MRC 1-70.*

The only other barrier used in the Watergate area is near the volleyball courts. A low chain-link fence placed next to a yew hedge stops errant balls from rolling into the road from the adjacent volleyball courts.

<b>Contributing Features</b>	<b>Noncontributing Features</b> 1. All traffic and pedestrian barriers
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***Recreational Equipment.*** The National Park Service has installed equipment required for baseball (or softball) games and volleyball matches in the areas designated for recreational use. Backstops and the posts for volleyball nets are the most prominent landscape features in these areas. Organized leagues mostly use these playing fields.

<b>Contributing Features</b>	<b>Noncontributing Features</b> 1. Baseball backstops 2. Volleyball nets
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